FORM 3

AMENDED REPORT ☐

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL		**1. WELL NAME and NUMBER** NBU 920-13C4BS
2. TYPE OF WORK DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○		**3. FIELD OR WILDCAT** NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO		**5. UNIT or COMMUNITIZATION AGREEMENT NAME** NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		**7. OPERATOR PHONE** 720 929-6587
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		**9. OPERATOR E-MAIL** mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0579	**11. MINERAL OWNERSHIP** FEDERAL ◉ INDIAN ○ STATE ○ FEE ○	**12. SURFACE OWNERSHIP** FEDERAL ○ INDIAN ◉ STATE ○ FEE ○
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Tribe	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES ◉ (Submit Commingling Application) NO ○	**19. SLANT** VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

20. LOCATION OF WELL	**FOOTAGES**	**QTR-QTR**	**SECTION**	**TOWNSHIP**	**RANGE**	**MERIDIAN**
LOCATION AT SURFACE	405 FNL 2146 FWL	NENW	13	9.0 S	20.0 E	S
Top of Uppermost Producing Zone	920 FNL 2100 FWL	NENW	13	9.0 S	20.0 E	S
At Total Depth	920 FNL 2100 FWL	NENW	13	9.0 S	20.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 920	**23. NUMBER OF ACRES IN DRILLING UNIT** 1920
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 520	**26. PROPOSED DEPTH** MD: 10727 TVD: 10670
27. ELEVATION - GROUND LEVEL 4710	**28. BOND NUMBER** WYB000291	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** Permit #43-8496

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**	☑ **COMPLETE DRILLING PLAN**
☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**	☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**	☑ **TOPOGRAPHICAL MAP**

NAME Danielle Piernot	**TITLE** Regulatory Analyst	**PHONE** 720 929-6156
SIGNATURE	**DATE** 06/29/2009	**EMAIL** danielle.piernot@anadarko.com

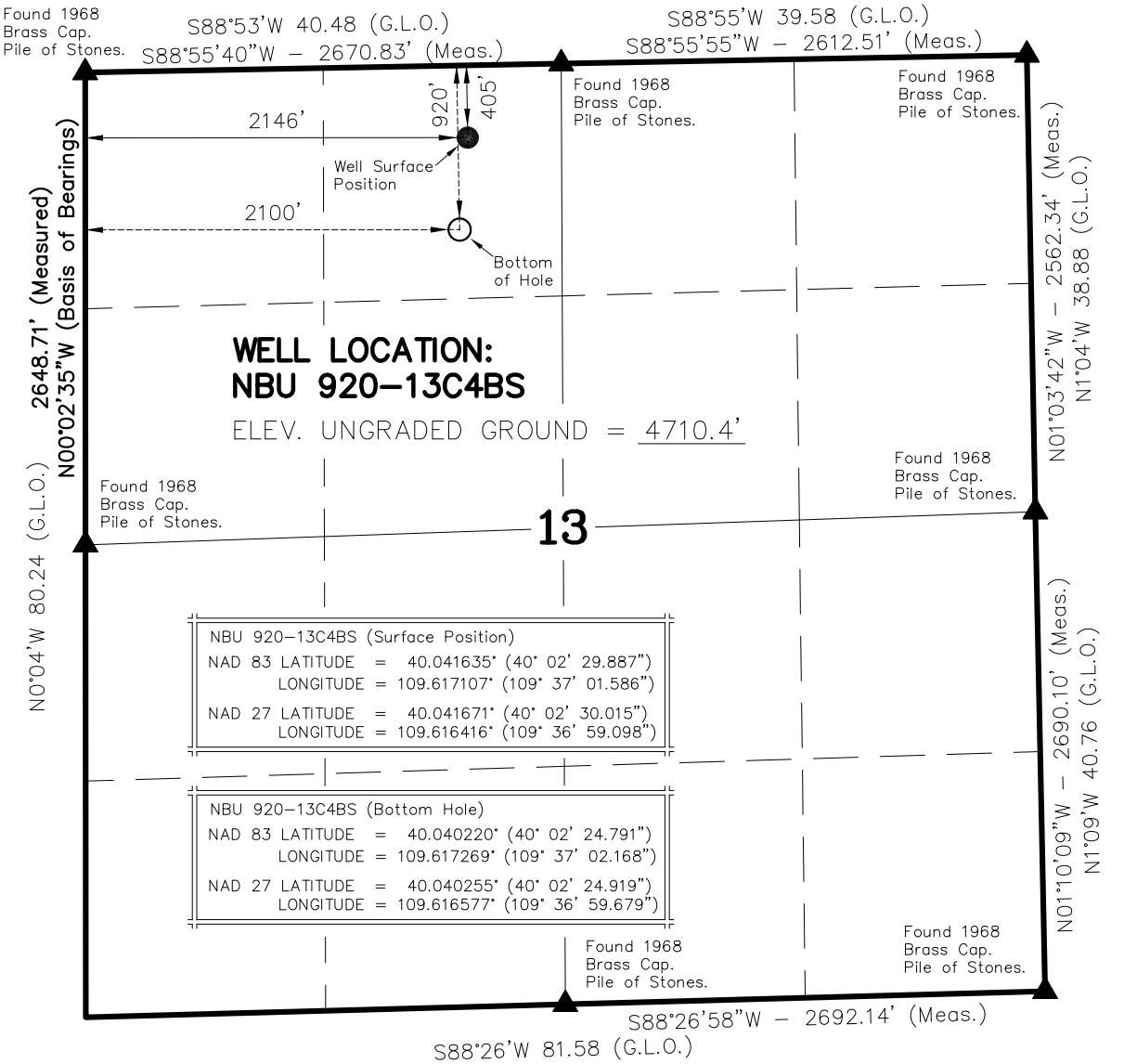
API NUMBER ASSIGNED 43047505240000	**APPROVAL**  Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	10727		
Pipe	**Grade**	**Length**	**Weight**			
	Grade P-110 LT&C	10727	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2700		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2700	36.0			

'APIWellNo:43047505240000'

T9S, R20E, S.L.B.&M.



NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S05°00'28"W 517.78' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. Basis of elevation is the Northwest Corner of Section 12, T9S, R20E, S.L.B.&M. The elevation of this Section Corner is shown on the Ouray SE 7.5 Min. Quadrangle as being 4676'.

N

1000' 500' 0' 1000'

SCALE

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION No. 362251
STATE OF UTAH

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 920-13C4BS
WELL PLAT
920' FNL, 2100' FWL (Bottom Hole)
NE ¼ NW ¼ OF SECTION 13, T9S, R20E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST – VERNAL, UTAH 84078

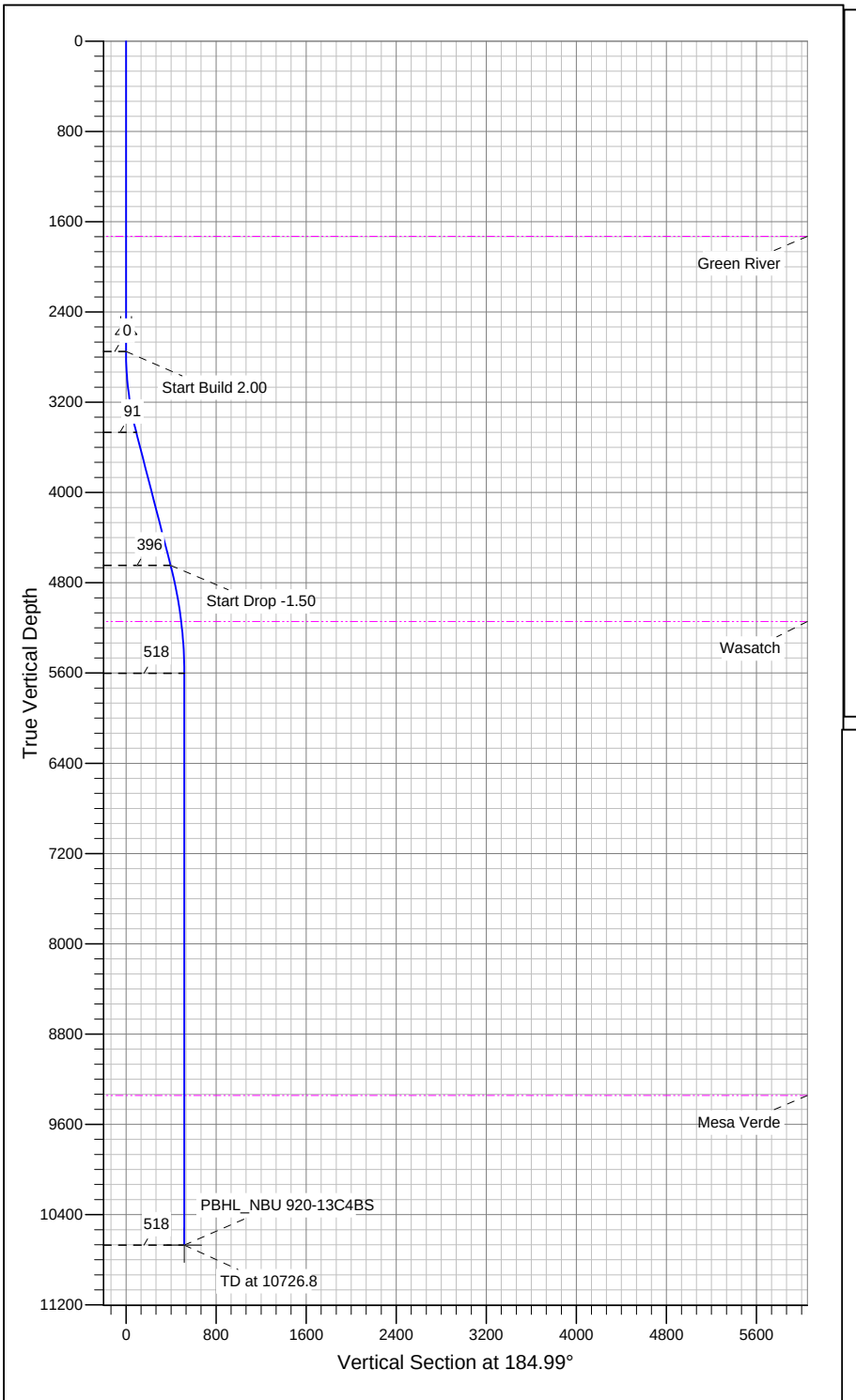
DATE SURVEYED: 01-02-09	SURVEYED BY: M.S.B.	SHEET
DATE DRAWN: 03-19-09	DRAWN BY: M.W.W.	2
SCALE: 1" = 1000'	Date Last Revised:	OF 12

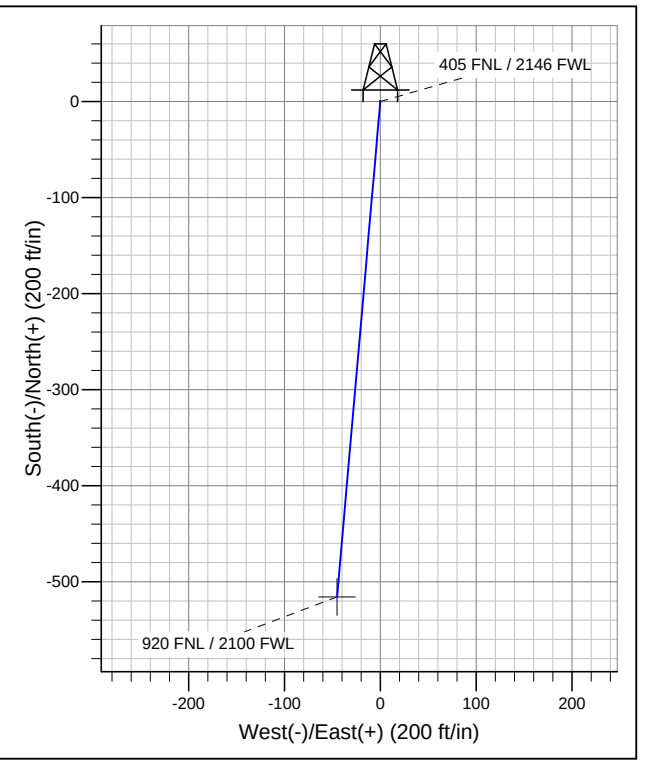
'APIWellNo:43047505240000'

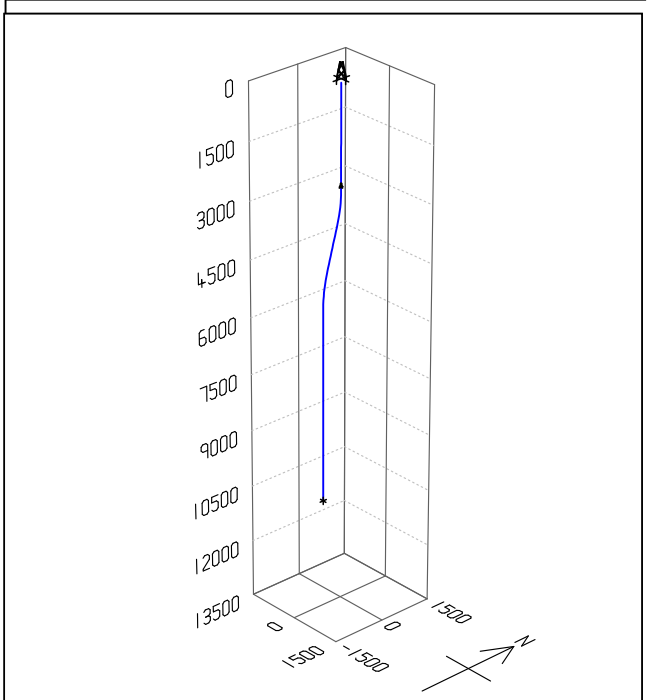
Anadarko Petroleum Corporation

Well Name: P_NBU 920-13C4BS
Surface Location: UINTAH_NBU 920-13C PAD
NAD 1927 (NADCON CONUS) Universal Transverse Mercator (US Survey Feet)
UTAH - UTM (feet), NAD27, Zone 12N
Ground Elevation: 4710.0

Northing	Easting	Latitude	Longitude
14544226.69	2027671.79	40.041671°N	109.616416°W

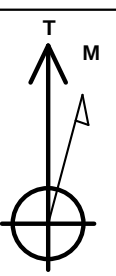






SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2750.0	0.00	0.00	2750.0	0.0	0.0	0.00	0.00	0.0
3	3475.0	14.50	184.99	3467.3	-90.9	-7.9	2.00	184.99	91.3
4	4692.2	14.50	184.99	4645.7	-394.5	-34.5	0.00	0.00	396.0
5	5658.8	0.00	0.00	5602.1	-515.7	-45.1	1.50	180.00	517.7
6	10726.8	0.00	0.00	10670.0	-515.7	-45.1	0.00	0.00	517.7



Azimuths to True North
Magnetic North: 11.39°

Magnetic Field
Strength: 52578.1snT
Dip Angle: 65.94°
Date: 4/22/2009
Model: IGRF200510

ROCKIES - PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 920-13C PAD
P_NBU 920-13C4BS
P_NBU 920-13C4BS

Plan: Plan #1 04-22-09 ZJRA6

Standard Planning Report - Geographic

22 April, 2009

APC

Planning Report - Geographic

Database:	apc_edmp	**Local Co-ordinate Reference:**	Well P_NBU 920-13C4BS
Company:	ROCKIES - PLANNING	**TVD Reference:**	WELL @ 4710.0ft (Original Well Elev)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**MD Reference:**	WELL @ 4710.0ft (Original Well Elev)
Site:	UINTAH_NBU 920-13C PAD	**North Reference:**	True
Well:	P_NBU 920-13C4BS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	P_NBU 920-13C4BS		
Design:	Plan #1 04-22-09 ZJRA6		

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site UINTAH_NBU 920-13C PAD

Site Position:		**Northing:**	14,544,243.61 ft	**Latitude:**	40.041717°N
From:	Lat/Long	**Easting:**	2,027,682.45 ft	**Longitude:**	109.616377°W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.89 °

Well P_NBU 920-13C4BS

Well Position	**+N/-S**	0.0 ft	**Northing:**	14,544,226.69 ft	**Latitude:**	40.041671°N
	+E/-W	0.0 ft	**Easting:**	2,027,671.79 ft	**Longitude:**	109.616416°W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,710.0 ft

Wellbore P_NBU 920-13C4BS

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/22/2009	11.39	65.94	52,578

Design Plan #1 04-22-09 ZJRA6

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	10,670.0	0.0	0.0	184.99

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,750.0	0.00	0.00	2,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,475.0	14.50	184.99	3,467.3	-90.9	-7.9	2.00	2.00	0.00	184.99	
4,692.2	14.50	184.99	4,645.7	-394.5	-34.5	0.00	0.00	0.00	0.00	
5,658.8	0.00	0.00	5,602.1	-515.7	-45.1	1.50	-1.50	0.00	180.00	
10,726.8	0.00	0.00	10,670.0	-515.7	-45.1	0.00	0.00	0.00	0.00	PBHL_NBU 920-13

APC

Planning Report - Geographic

Database:	apc_edmp	**Local Co-ordinate Reference:**	Well P_NBU 920-13C4BS
Company:	ROCKIES - PLANNING	**TVD Reference:**	WELL @ 4710.0ft (Original Well Elev)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**MD Reference:**	WELL @ 4710.0ft (Original Well Elev)
Site:	UINTAH_NBU 920-13C PAD	**North Reference:**	True
Well:	P_NBU 920-13C4BS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	P_NBU 920-13C4BS		
Design:	Plan #1 04-22-09 ZJRA6		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	14,544,226.69	2,027,671.79	40.041671°N	109.616416°W
1,730.0	0.00	0.00	1,730.0	0.0	0.0	14,544,226.69	2,027,671.79	40.041671°N	109.616416°W
Green River									
2,600.0	0.00	0.00	2,600.0	0.0	0.0	14,544,226.69	2,027,671.79	40.041671°N	109.616416°W
Surface Casing									
2,750.0	0.00	0.00	2,750.0	0.0	0.0	14,544,226.69	2,027,671.79	40.041671°N	109.616416°W
3,475.0	14.50	184.99	3,467.3	-90.9	-7.9	14,544,135.67	2,027,665.26	40.041421°N	109.616444°W
4,692.2	14.50	184.99	4,645.7	-394.5	-34.5	14,543,831.70	2,027,643.44	40.040588°N	109.616539°W
5,199.7	6.89	184.99	5,144.0	-488.2	-42.7	14,543,737.84	2,027,636.71	40.040330°N	109.616568°W
Wasatch									
5,658.8	0.00	0.00	5,602.1	-515.7	-45.1	14,543,710.34	2,027,634.74	40.040255°N	109.616577°W
9,400.8	0.00	0.00	9,344.0	-515.7	-45.1	14,543,710.34	2,027,634.74	40.040255°N	109.616577°W
Mesa Verde									
10,726.8	0.00	0.00	10,670.0	-515.7	-45.1	14,543,710.34	2,027,634.74	40.040255°N	109.616577°W

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_NBU 920-13C4 - plan hits target center - Point	0.00	0.00	10,670.0	-515.7	-45.1	14,543,710.34	2,027,634.74	40.040255°N	109.616577°W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,600.0	2,600.0	Surface Casing	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,730.0	1,730.0	Green River		0.00	
5,199.7	5,144.0	Wasatch		0.00	
9,400.8	9,344.0	Mesa Verde		0.00	

NBU 920-13C4BS
Pad: NBU 920-13C
Surface: 405' FNL, 2,146' FWL (NE/4NW/4)
BHL: 920' FNL 2,100' FWL (NE/4NW/4)
Sec. 13 T9S R20E

Uintah, Utah
Mineral Lease: UTU 0579

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. Estimated Tops of Important Geologic Markers:
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 – Surface	
Green River	1,730'	
Birds Nest	1,987'	Water
Mahogany	2,497'	Water
Wasatch	5,144'	Gas
Mesaverde	8,351'	Gas
MVU2	9,344'	Gas
MVL1	9,849'	Gas
TVD	10,670'	
TD	10,727'	

3. Pressure Control Equipment (Schematic Attached)

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. Drilling Fluids Program:

Please refer to the attached Drilling Program.

6. Evaluation Program:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,727' TD (MD), approximately equals 6,572 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 4,189 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found

competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see

attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

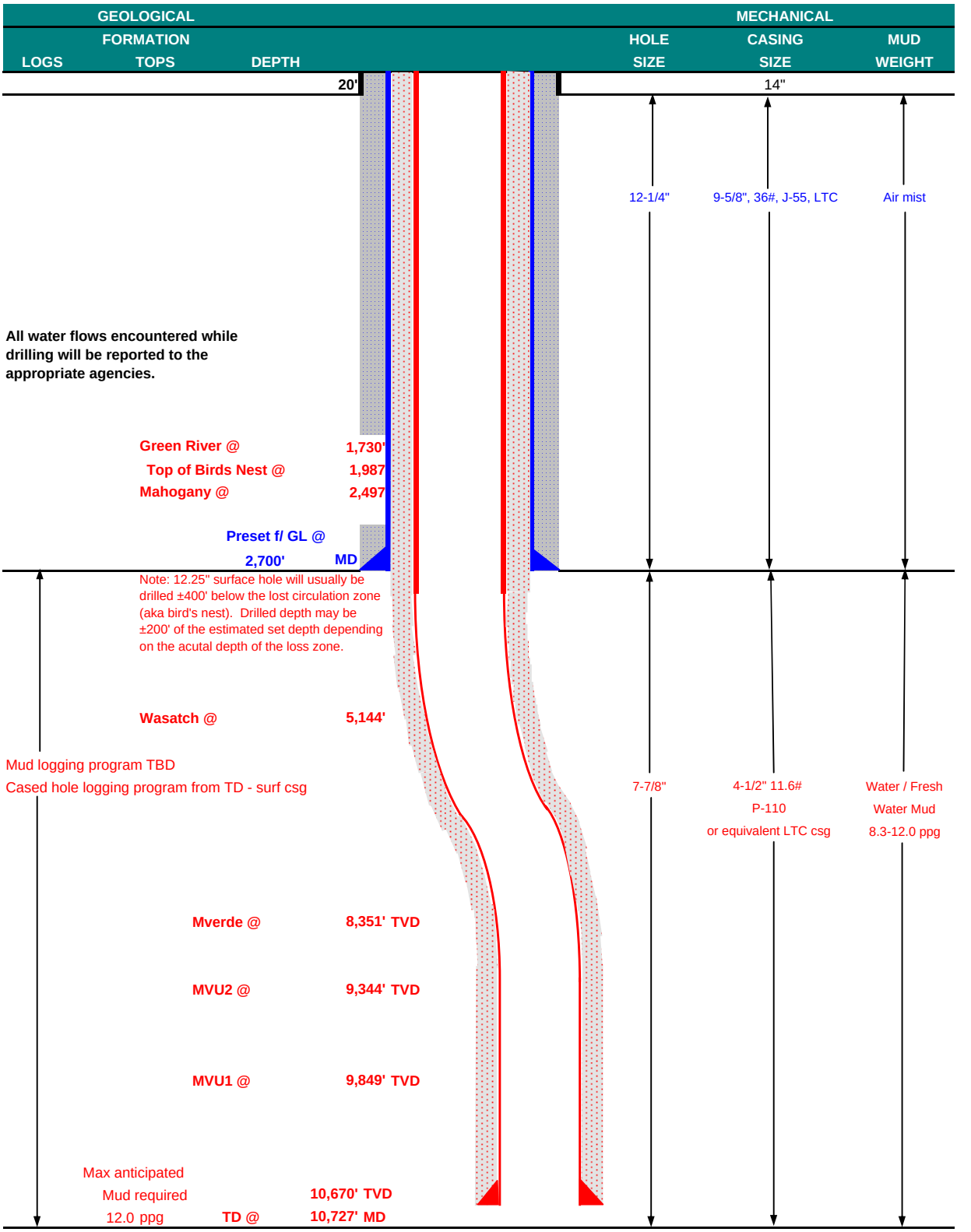
Please refer to the attached Drilling Program.

'APIWellNo:43047505240000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	June 29, 2009
WELL NAME	**NBU 920-13C4BS**			TD	10,670' TVD 10,727' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,710'
SURFACE LOCATION	NE/4 NW/4	405' FNL	2,146' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.041635	Longitude:	-109.617107		NAD 83	
BTM HOLE LOCATION	NE/4 NW/4	920' FNL	2,100' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.040220	Longitude:	-109.617269		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), Ute Tribe (Surface), UDOGM Tri-County Health Dept.						



'APIWellNo:43047505240000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2,700	36.00	J-55	LTC	0.81	1.60	5.93
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	9,707	11.60	I-80	LTC	1.80	0.95	1.85
								10,690	8,650	279,000
	4-1/2"	9,707	to	10,727	11.60	HCP-110	LTC	47.64	1.30	28.88

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,189 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,572 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	2,200'	65/35 Poz + 6% Gel + 10 pps gilsonite	520	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,637'	Premium Lite II + 3% KCl + 0.25 pps	440	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,090'	50/50 Poz/G + 10% salt + 2% gel	1,490	40%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

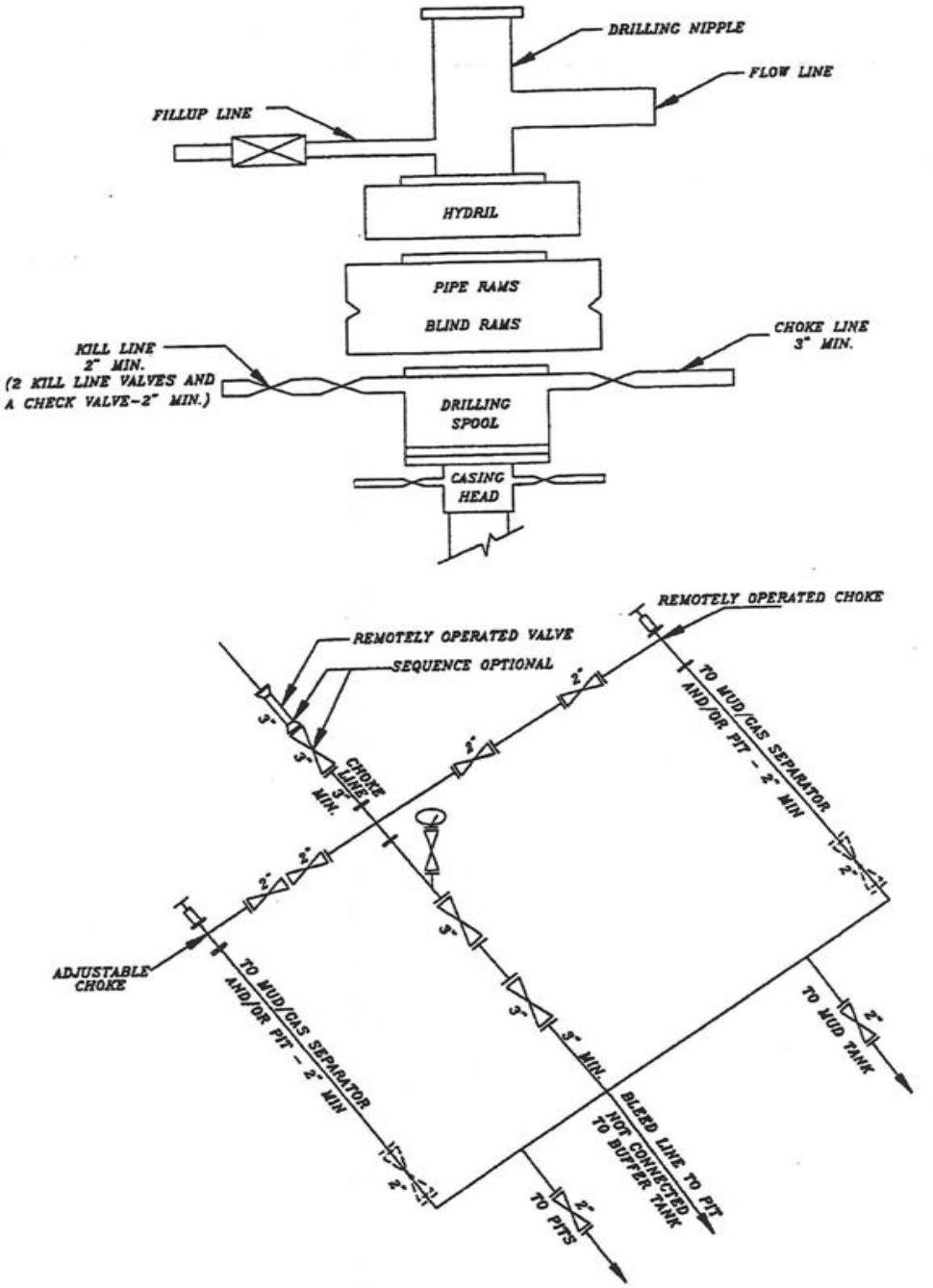
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
John Merkel / Lovel Young

EXHIBIT A
NBU 920-13C4BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

'APIWellNo:43047505240000'

WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD – NBU 920-13C

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 13, T9S, R20E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°02'35"W.

N

LATITUDE & LONGITUDE
Surface Position – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
920-12M4CS	40°02'29.850" 40.041625°	109°36'59.240" 109.616455°
920-13C4BS	40°02'30.015" 40.041671°	109°36'59.098" 109.616416°
920-13C1AS	40°02'30.180" 40.041717°	109°36'58.958" 109.616377°
Existing Well NBU 920-13C	40°02'30.346" 40.041763°	109°36'58.816" 109.616338°

LATITUDE & LONGITUDE
Bottom Hole – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
920-12M4CS	40°02'36.119" 40.043366°	109°37'17.983" 109.621662°
920-13C4BS	40°02'24.919" 40.040255°	109°36'59.679" 109.616577°
920-13C1AS	40°02'32.422" 40.042339°	109°36'53.259" 109.614794°

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
920-12M4CS	634'	-1,458'
920-13C4BS	-516'	-45'
920-13C1AS	227'	443'

Az=62.89556°
N62°53'44"E – 498.06'
(To Bottom Hole)

N66°29'14"W – 1590.23'
Az=293.51278°
(To Bottom Hole)

20'
20'
20'

EXISTING WELL NBU 920-13C

NBU 920-13C1AS
Az. to Exist. W.H.=33.12361° 20.0'

NBU 920-13C4BS
Az. to Exist. W.H.=33.12361° 40.0'

NBU 920-12M4CS
Az. to Exist. W.H.=33.12361° 60.0'

S33°07'25"W
Az=213.12361°

Az=185.00778°
S05°00'28"W – 517.78'
(To Bottom Hole)

SURFACE POSITION FOOTAGES:

NBU 920-12M4CS
422' FNL & 2135' FWL

NBU 920-13C4BS
405' FNL & 2146' FWL

NBU 920-13C1AS
389' FNL & 2156' FWL

EXISTING WELL NBU 920-13C
372' FNL & 2168' FWL

BOTTOM HOLE FOOTAGES

NBU 920-12M4CS
240' FSL & 675' FWL (Sec. 12)

NBU 920-13C4BS
920' FNL & 2100' FWL

NBU 920-13C1AS
170' FNL & 2600' FWL

LATITUDE & LONGITUDE
Surface Position – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
920-12M4CS	40°02'29.722" 40.041589°	109°37'01.729" 109.617147°
920-13C4BS	40°02'29.887" 40.041635°	109°37'01.586" 109.617107°
920-13C1AS	40°02'30.052" 40.041681°	109°37'01.447" 109.617069°
Existing Well NBU 920-13C	40°02'30.218" 40.041727°	109°37'01.305" 109.617029°

LATITUDE & LONGITUDE
Bottom Hole – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
920-12M4CS	40°02'35.991" 40.043331°	109°37'20.473" 109.622354°
920-13C4BS	40°02'24.791" 40.040220°	109°37'02.168" 109.617269°
920-13C1AS	40°02'32.294" 40.042304°	109°36'55.747" 109.615485°

60' 30' 0' 60'
SCALE

Kerr-McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 920-12M4CS,
NBU 920-13C4BS & NBU 920-13C1AS
LOCATED IN SECTION 13, T9S, R20E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

DATE SURVEYED: 01-02-09	SURVEYED BY: M.S.B.
DATE DRAWN: 03-19-09	DRAWN BY: M.W.W.
	REVISED:

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET 4 OF 12

PROPOSED ACCESS ROAD RE-ROUTE

4710 4720 4730

EXISTING ACCESS ROAD

A'

TOPSOIL STOCKPILE

RESERVE PIT & EXCESS CUT STOCKPILE

MOVE EXISTING TOPSOIL PILE TO PROPOSED LOCATION

2 F2.6 | 3 C1.5 | A C2.4 | B C3.9 | 4 C4.6

160' | 170' | 10' | 100'

250' | 250' | 250'

RESERVE PIT 12' DEPTH SLOPE 2:1

BOILER | DIESEL TANK | GENERATOR | MUD PUMP 1 | MUD PUMP 2 | MUD TANK | WATER TANK | MUD TANK

B | B'

EXISTING NBU 920-13C

13C1AS

13C4BS

12M4CS

20' | 20' | 20'

1 F2.8 | D C0.2 | C C8.2 | 5 C9.0 | W C0.5

EXISTING METER

PIPERACKS | PIPE LUB

EXISTING TANK AND BERM

DERRICK STAND

EXISTING SEPERATOR

E C0.3 | F C8.8 | H C2.9 | G C7.2

100' | 100' | 140' | 110'

BACKFLOW PIT 12' DEPTH SLOPE 2:1

FILL | CUT

225'

10' | 70' | 62'

6 C8.1 | 7 C4.5 | 8 C5.7 | 9 C3.4 | 10 F1.1

160'

TOPSOIL STOCKPILE

RESERVE PIT & EXCESS CUT STOCKPILE

4710 4720 4730 4740 4750 4760

A

WELL PAD NBU 920-13C QUANTITIES

EXISTING GRADE @ CENTER OF WELL PAD = 4,710.4'
FINISHED GRADE ELEVATION = 4,709.9'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 11,380 C.Y.
TOTAL FILL FOR WELL PAD = 2,541 C.Y.
TOPSOIL @ 6" DEPTH = 1,999 C.Y.
EXCESS MATERIAL = 8,839 C.Y.
TOTAL DISTURBANCE = 3.61 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 28,730 BARRELS
RESERVE PIT VOLUME
+/- 7,720 CY
BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
+/- 9,490 BARRELS
BACKFLOW PIT VOLUME
+/- 2,660 CY

WELL PAD LEGEND

EXISTING WELL LOCATION
PROPOSED WELL LOCATION
EXISTING CONTOURS (2' INTERVAL)
PROPOSED CONTOURS (2' INTERVAL)

N

HORIZONTAL 0 30 60 1" = 60'

2' CONTOURS

KERR-MCGEE OIL & GAS ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

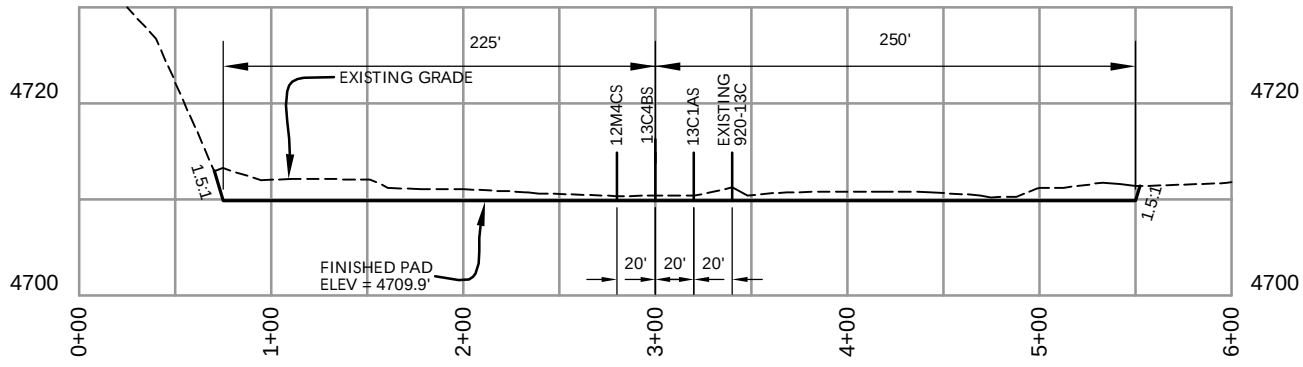
WELL PAD - LOCATION LAYOUT
NBU 920-12M4CS,
NBU 920-13C4BS & NBU920-13C1AS
LOCATED IN SECTION 13, T.9S., R.20E.
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

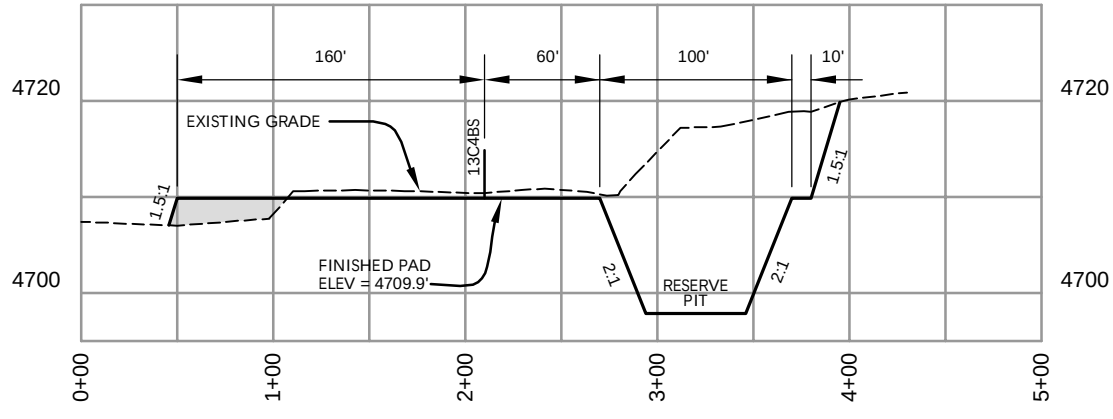
Scale: 1"=60'	Date: 3/19/09	SHEET NO: 5 5 OF 12
REVISED:		

Timberline Engineering & Land Surveying, Inc. (435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078

'APIWellNo:43047505240000'
K:\ANADARKO\2008_27_NBU_Directional_Wells\DWG\NBU FINAL SEC 18,19,28.dwg, 13C, 3/20/2009 5:30:20 PM



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS MAXIMUM RESERVE PIT DEPTH.

KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

WELL PAD - CROSS SECTIONS
NBU 920-12M4CS,
NBU 920-13C4BS & NBU920-13C1AS
LOCATED IN SECTION 13, T.9S., R.20E.
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

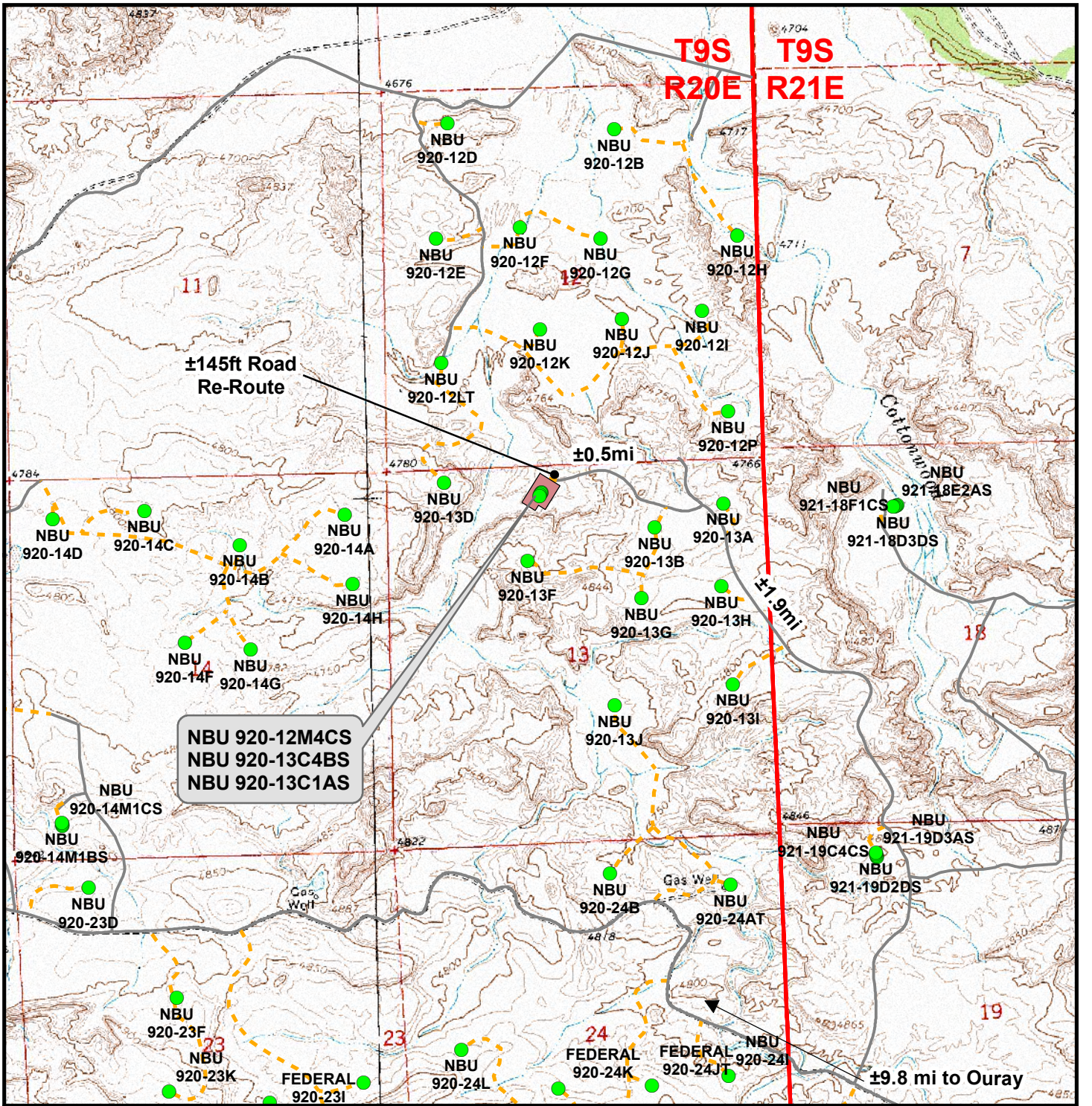
Scale: 1"=100'	Date: 3/19/09	SHEET NO: 6 6 OF 12
REVISED:		

Timberline Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365

'API WellNo:43047505240000'
K:\ANADARKO\2008_27_NBU_Directional_Wells\DWGS\NBU FINAL SEC 18,19,28.dwg, Model, 3/20/2009 5:24:00 PM

’APIWellNo:43047505240000’

’APIWellNo:43047505240000’



Legend

Well - Proposed | Well Pad | Road - Proposed | Road - Existing

Total Proposed Road Length: ±145ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

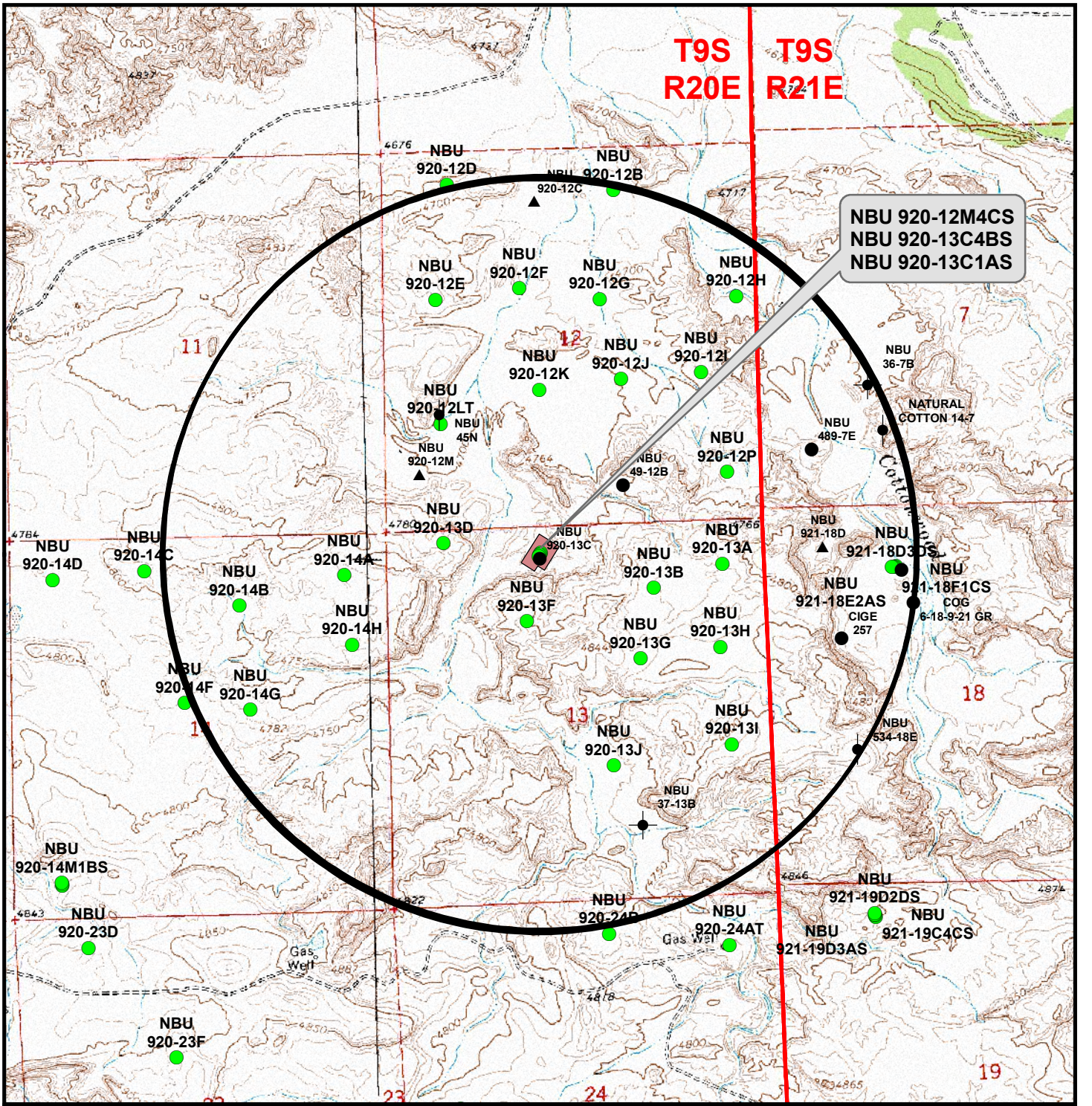
NBU 920-12M4CS,
NBU 920-13C4BS & NBU 920-13C1AS
Topo B
Located In Section 13, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 9	9 of 12
Drawn: JELo	Date: 20 Mar 2009		
Revised:	Date:		

’APIWellNo:43047505240000’



Legend

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Well - Proposed
- Well - 1 Mile Radius
- Well Pad
- Producing
- Approved permit (APD); not yet spudded
- Spudded (Drilling commenced: Not yet comple
- Location Abandoned
- Temporarily-Abandoned
- Plugged and Abandoned
- Shut-In

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

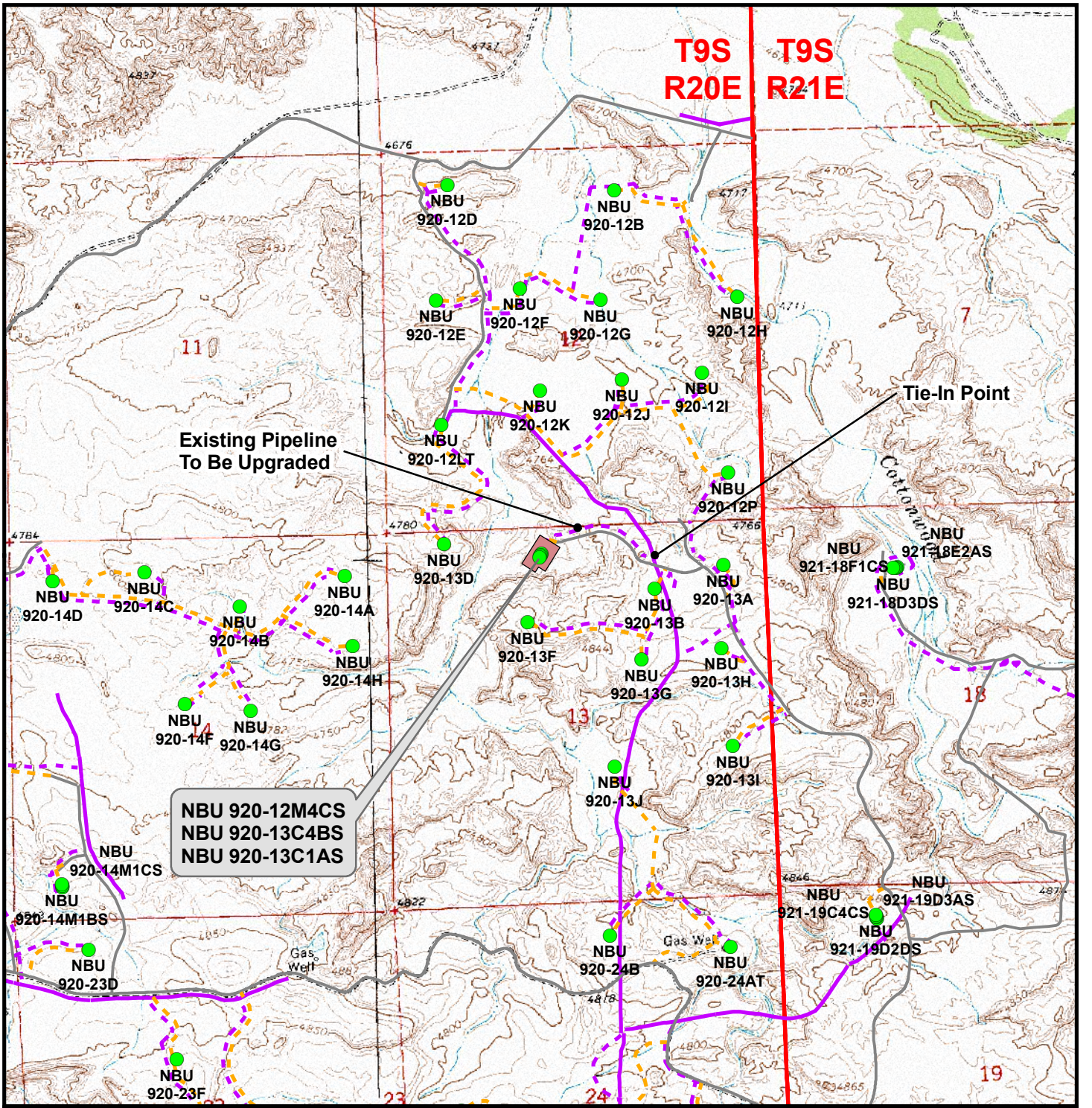
NBU 920-12M4CS,
NBU 920-13C4BS & NBU 920-13C1AS
Topo C
Located In Section 13, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 10 of 12	
Drawn: JELo	Date: 20 Mar 2009		
Revised:	Date:		

'APIWellNo:43047505240000'



Legend

Well - Proposed | Well Pad | Road - Proposed | Pipeline - Proposed | Road - Existing | Pipeline - Existing

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±1,840ft
Proposed Pipeline Length Around Pad: ±660ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 920-12M4CS,
NBU 920-13C4BS & NBU 920-13C1AS
Topo D
Located In Section 13, T9S, R20E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 11	11 of 12
Drawn: JELo	Date: 20 Mar 2009		
Revised:	Date:		

'APIWellNo:43047505240000'

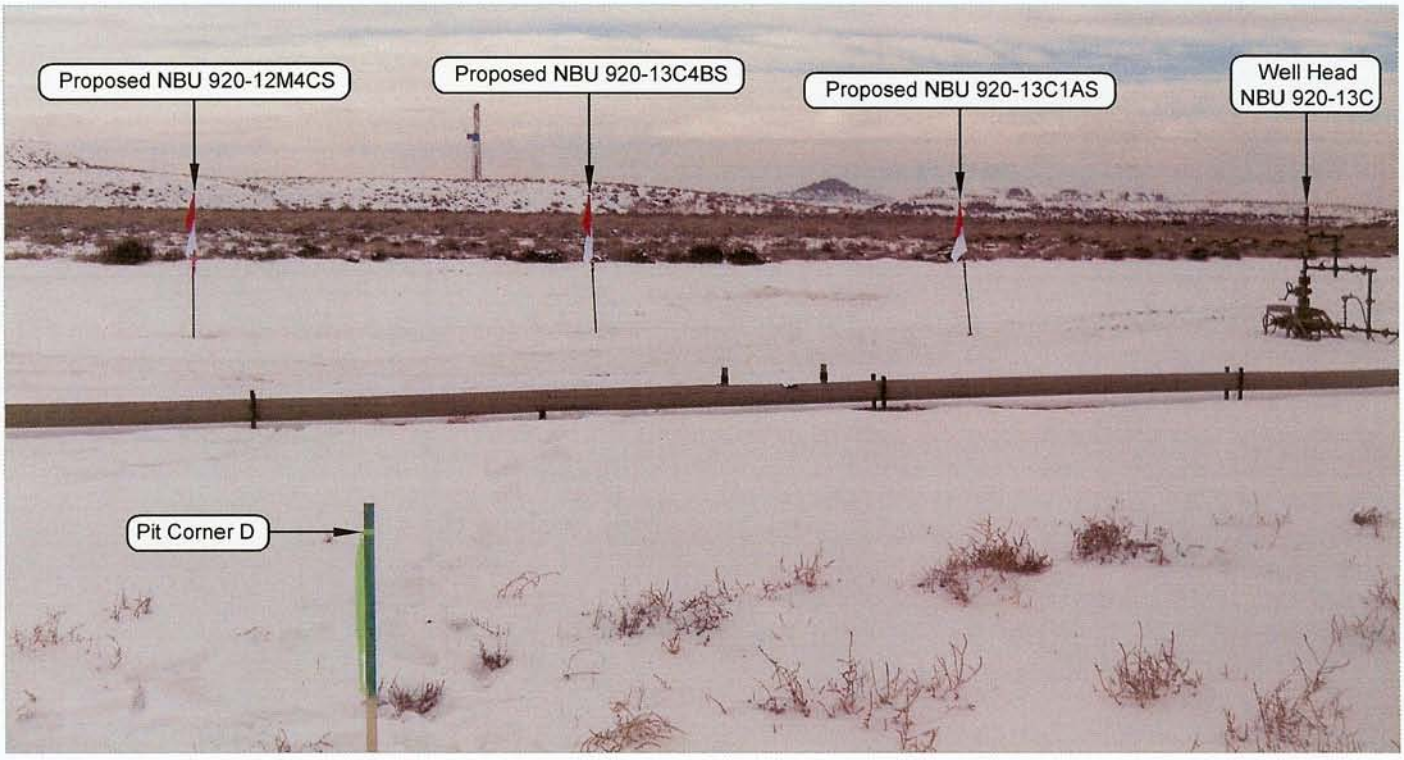


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKES CAMERA ANGLE: NORTHWESTERLY

PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD CAMERA ANGLE: WESTERLY

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 920-12M4CS,
NBU 920-13C4BS & NBU 920-13C1AS
LOCATED IN SECTION 13, T9S, R20E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

LOCATION PHOTOS		DATE TAKEN: 01-02-09
		DATE DRAWN: 03-19-09
TAKEN BY: M.S.B.	DRAWN BY: M.W.W.	REVISED:

Timberline Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078
(435) 789-1365

SHEET 7 OF 12

Kerr-McGee Oil & Gas Onshore, LP
NBU 920-12M4CS, NBU 920-13C4BS, & NBU 920-13C1AS
Section 13, T9S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 5.3 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE EAST. EXIT LEFT AND PROCEED IN A NORTHEASTERLY THEN SOUTHEASTERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 4.5 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE NORTH. EXIT LEFT AND PROCEED IN A NORTHERLY THEN NORTHWESTERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 1.9 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE NORTHWEST. EXIT LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 0.5 MILES TO THE NBU 920-13C WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 42.9 MILES IN A SOUTHERLY DIRECTION.

NBU 920-12M4CS
Surface: 422' FNL, 2,135' FWL (NE/4NW/4) Sec. 13
BHL: 240' FSL 675' FWL (SW/4SW/4) Sec. 12
Mineral Lease: UTU 0144868B

NBU 920-13C1AS
Surface: 389' FNL, 2,156' FWL (NE/4NW/4) Sec. 13
BHL: 170' FNL 2,600' FWL (NE/4NW/4) Sec. 13
Mineral Lease: UTU 0579

NBU 920-13C4BS
Surface: 405' FNL, 2,146' FWL (NE/4NW/4) Sec. 13
BHL: 920' FNL 2,100' FWL (NE/4NW/4) Sec. 13
Mineral Lease: UTU 0579

Pad: NBU 920-13C
T9S R20E

Uintah, Utah

Surface Owner: Ute Indian Tribe

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN SUBMITTED WITH SITE-SPECIFIC INFORMATION

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) documents. NOSs were submitted showing the surface locations in NE/4 NW/4 of Section 13 T9S R20E.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BIA-Ft Duchesne Office.

An on-site meeting was held on June 24, 2009. Present were:

- Verlyn Pindell and Dave Gordon – BLM;
- Kolby Kay and Mitch Batty – Timberline Surveying, Inc.
- Tony Kazeck, Jeff Samuels, Raleen White, David Liddell, and Hal Blanchard – Kerr-McGee
- Bucky Secakuku – BIA
- Nick Hall – Grasslands Consulting, Inc.
- Scott Carson – Smiling Lake Consulting
- Keith Montgomery – Montgomery Archaeological Consultants, Inc.

Directional Drilling:
In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:
A) Refer to Topo Map A for directions to the location.
B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:
See MDP for additional details on road construction.
Approximately ±0.03 miles (±145') of new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.

3. Location of Existing Wells Within a 1-Mile Radius:
Please refer to Topo Map C.

4. Location of Existing and Proposed Facilities:
See MDP for additional details on Existing and Proposed Facilities.

The following guidelines will apply if the well is productive.
Approximately ±2,500' of pipeline is proposed. Refer to Topo D for the existing pipeline. Appropriate surface use agreements have been or will be obtained from the Ute Indian Tribe. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place

5. Location and Type of Water Supply:
See MDP for additional details on Location and Type of Water Supply.

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, Application number 53617. Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. Source of Construction Materials:
See MDP for additional details on Source of Construction Materials.

7. Methods of Handling Waste Materials:
See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
NBU #159 in Sec. 35 T9S R21E
Ace Oilfield in Sec. 2 T6S R20E
MC&MC in Sec. 12 T6S R19E
Pipeline Facility in Sec. 36 T9S R20E
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
Bonanza Evaporation Pond in Sec. 2 T10S R23E

8. Ancillary Facilities:
See MDP for additional details on Ancillary Facilities.

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)
See MDP for additional details on Well Site Layout.

All pits will be fenced according to the following minimum standards:

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

10. Plans for Reclamation of the Surface:
See MDP for additional details on Plans for Reclamation of the Surface.

Kerr-McGee shall call the BIA for the seed mixture prior to starting interim and/or final reclamation actions.

11. Surface/Mineral Ownership:
The well pad and access road are located on lands owned by:

Ute Indian Tribe
PO Box 70
Fort Duchesne, Utah 84026
435-722-5141

The mineral ownership is listed below:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
435-781-4400

12. Other Information:

See MDP for additional details on Other Information.

13. Lessee's or Operators' Representative & Certification:

Kathy Schneebeck Dulnoan
Staff Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Kathy Schneebeck Dulnoan

June 29, 2009
Date

Kerr-McGee Oil & Gas Onshore LP

1099 18th Street, Suite 1800
Denver, CO 80202-1918
P.O. Box 173779
Denver, CO 80217-3779
720-929-6000

June 9, 2009

Ms. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 920-13C4BS
T9S-R20E
Section 13: NENW (Surf & BH)
Surface: 405' FNL, 2146' FWL
Bottom Hole: 920' FNL, 2100' FWL
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 920-13C4BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it and EOG (EOG written consent letter enclosed) are the sole working interest owners within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,
KERR-MCGEE OIL & GAS ONSHORE LP

Lynn Padgett
Staff Landman

enclosures

'APIWellNo:43047505240000'

Kerr-McGee Oil & Gas Onshore LP
1099 18th Street, Suite 1800
Denver, CO 80202-1918
P.O. Box 173779
Denver, CO 80217-3779
720-929-6000

April 28, 2009

Ms. Diana Mason
Utah Department of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, Utah 54114-5801

Re: Directional Applications
NBU 920-13C1AS
NBU 920-13C4BS
Uintah County, Utah
Natural Buttes Unit

Dear Ms. Mason:

Pursuant to the filing of the Applications for Permit to Drill for the NBU 920-13C1AS and NBU 920-13C4BS, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling.

EOG Resources, Inc. has received notification of the planned directional wells and consents to the directional drilling plan.

By: _____
Name: J. Michael Schween
Title: Agent and Attorney-in-Fact
EOG Resources, Inc.

'APIWellNo:43047505240000'

’APIWellNo:43047505240000’

CLASS I REVIEW OF KERR-MCGEE OIL & GAS ONSHORE LP’S 14 PROPOSED WELL LOCATIONS AND ACCESS/PIPELINE REROUTE IN T9S, R20E, SECTIONS 12, 13, 14, 20, 21, AND 24 UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Ute Indian Tribe
Uintah and Ouray Agency

Prepared Under Contract With:

Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 09-025

April 2, 2009

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

IPC #09-59

Paleontological Reconnaissance Survey Report

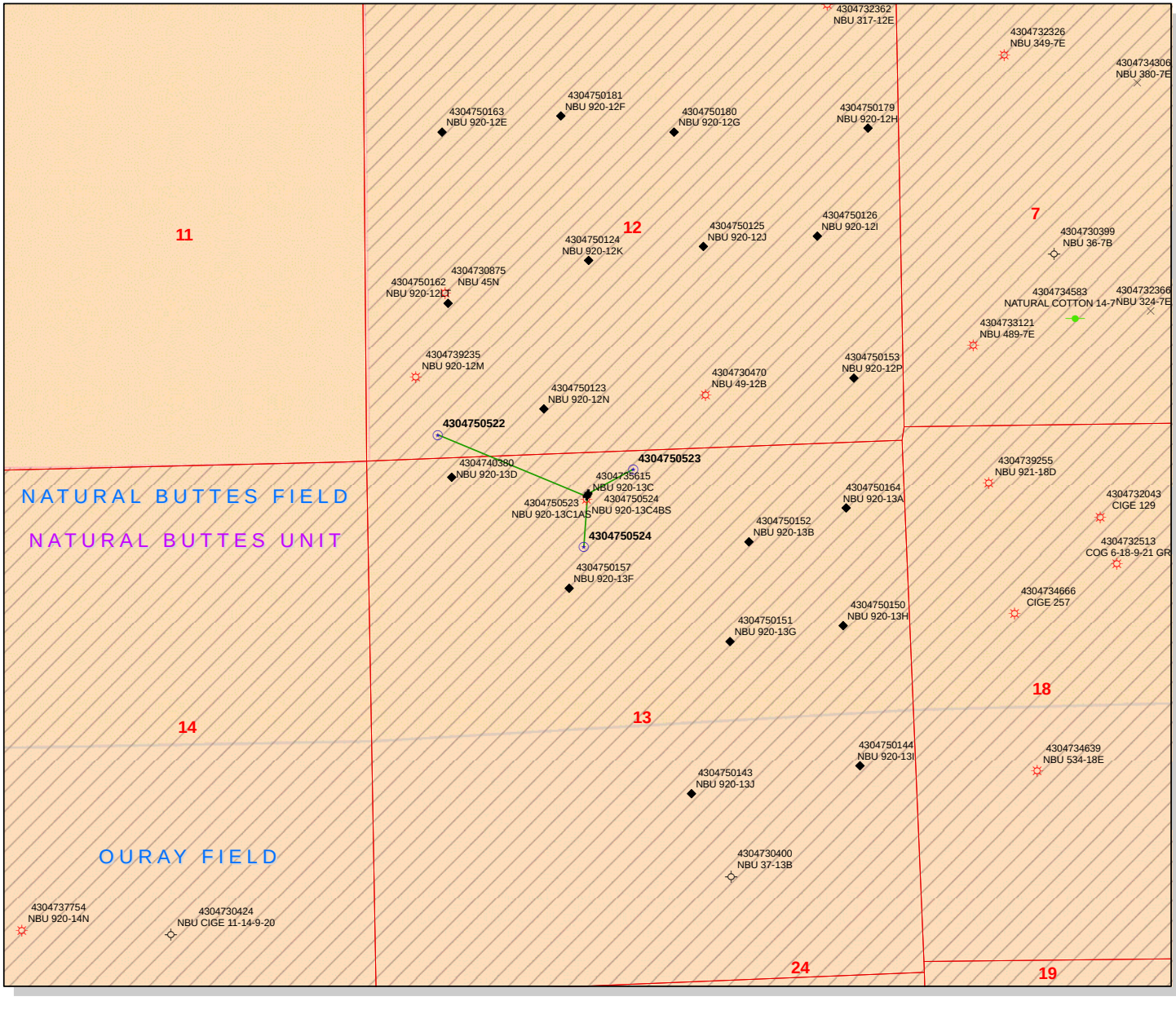
Survey of Kerr McGee's Proposed Well Pads, Multi-Well Pad, Access Roads, Pipeline Upgrade, and Pipelines for "NBU #920-12M4CS, 13C4BS & 13C1AS, 14K & Federal #920-24O" (Sec. 13, 14, & 24, T 9 S, R 20 E)

Ouray & Ouray SE
Topographic Quadrangles
Uintah County, Utah

April 3, 2009

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078

'APIWellNo:43047505240000'



API Number: 4304750524

Well Name: NBU 920-13C4BS

Township 09.0 S Range 20.0 E Section 13

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

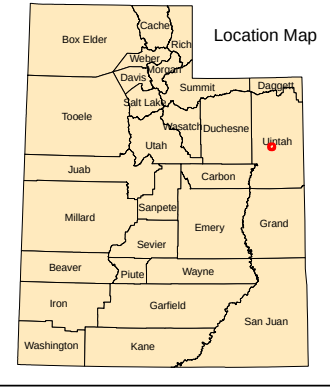
Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

Fields
STATUS
ACTIVE
COMBINED
Sections

Wells Query Events
<all other values>
GIS_STAT_TYPE
<Null>
APD
DRL
GI
GS
LA
NEW
OPS
PA
PGW
POW
RET
SGW
SOW
TA
TW
WD
WI
WS

Location Map



1,200 600 0 1,200 Feet

1:12,000

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

July 2, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50522	NBU 920-12M4CS	Sec 13 T09S R20E 0422 FNL 2135 FWL
		BHL Sec 12 T09S R20E 0240 FSL 0675 FWL
43-047-50523	NBU 920-13C1AS	Sec 13 T09S R20E 0389 FNL 2156 FWL
		BHL Sec 13 T09S R20E 0170 FNL 2600 FWL
43-047-50524	NBU 920-13C4BS	Sec 13 T09S R20E 0405 FNL 2146 FWL
		BHL Sec 13 T09S R20E 0920 FNL 2100 FWL
43-047-50525	NBU 920-14M1BS	Sec 14 T09S R20E 0468 FSL 0637 FWL
		BHL Sec 14 T09S R20E 1220 FSL 0675 FWL
43-047-50527	NBU 920-14M3AS	Sec 14 T09S R20E 0488 FSL 0633 FWL
		BHL Sec 14 T09S R20E 0590 FSL 0635 FWL
43-047-50528	NBU 921-22C1CS	Sec 15 T09S R21E 0359 FSL 2133 FWL
		BHL Sec 22 T09S R21E 0446 FNL 2071 FWL
43-047-50529	NBU 921-22C4BS	Sec 15 T09S R21E 0360 FSL 2153 FWL
		BHL Sec 22 T09S R21E 0812 FNL 2065 FWL
43-047-50530	NBU 921-22D1BS	Sec 15 T09S R21E 0357 FSL 2093 FWL
		BHL Sec 22 T09S R21E 0226 FNL 0819 FWL
43-047-50531	NBU 921-22D1CS	Sec 15 T09S R21E 0358 FSL 2113 FWL

BHL Sec 22 T09S R21E 0566 FNL 0789 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:7-2-09

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/29/2009 **API NO. ASSIGNED:** 43047505240000

WELL NAME: NBU 920-13C4BS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NENW 13 090S 200E **Permit Tech Review:** ☑

SURFACE: 0405 FNL 2146 FWL **Engineering Review:** ☑

BOTTOM: 0920 FNL 2100 FWL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 40.04163 **LONGITUDE:** -109.61636

UTM SURF EASTINGS: 618040.00 **NORTHINGS:** 4433084.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0579 **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

SURFACE OWNER: 2 - Indian **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☑ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit: NATURAL BUTTES

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 173-14

Effective Date: 12/2/1999

Siting: 460' fr u bdry & uncomm. tract

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: NBU 920-13C4BS
API Well Number: 43047505240000
Lease Number: UTU 0579
Surface Owner: INDIAN
Approval Date: 7/16/2009

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:
In accordance with Board Cause No. 173-14 commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

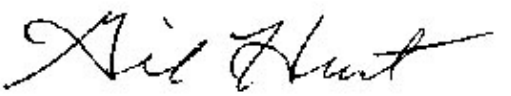
Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:



Gil Hunt
Associate Director, Oil & Gas

Form 3160-3
(August 2007)

RECEIVED
JUN 30 2009
BLM

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU0579

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
891008900A

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

8. Lease Name and Well No.
NBU 920-13C4BS

2. Name of Operator
KERRMCGEE OIL&GAS ONSHORE LP
Contact: DANIELLE E PIERNOT
Mail: Danielle.Piernot@anadarko.com

9. API Well No.
43 047 50524

3a. Address
PO BOX 173779
DENVER, CO 80202-3779

3b. Phone No. (include area code)
Ph: 720-929-6156
Fx: 720-929-7156

10. Field and Pool, or Exploratory
NATURAL BUTTES

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface NENW 405FNL 2146FWL 40.04163 N Lat, 109.61711 W Lon

At proposed prod. zone NENW 920FNL 2100FWL 40.04022 N Lat, 109.61727 W Lon

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 13 T9S R20E Mer SLB

14. Distance in miles and direction from nearest town or post office*
APPROXIMATELY 12 MILES SOUTHEAST OF OURAY, UTAH

12. County or Parish
UINTAH

13. State
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
920 FEET

16. No. of Acres in Lease
1920.00

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
APPROXIMATELY 520 FEET

19. Proposed Depth
10727 MD
10670 TVD

20. BLM/BIA Bond No. on file
WYB000291

21. Elevations (Show whether DF, KB, RT, GL, etc.
4710 GL

22. Approximate date work will start
07/20/2009

23. Estimated duration
60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
DANIELLE E PIERNOT Ph: 720-929-6156

Date
06/30/2009

Title
REGULATORY ANALYST

Approved by (Signature)
Stephanie J Howard

Name (Printed/Typed)
Stephanie J Howard

Date
11/23/09

Title
Acting Assistant Field Manager Lands & Mineral Resources

Office
VERNAL FIELD OFFICE

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

NOTICE OF APPROVAL

Electronic Submission #71506 verified by the BLM Well Information System
For KERRMCGEE OIL &GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by GAIL JENKINS on 07/01/2009 ()

NOS APD Posted 7/2/09

RECEIVED
NOV 30 2009
DIV. OF OIL, GAS & MINING

AFMSS#

UDOGM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

096XJ5107AE

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore, LP**	**Location:**	**NENW, Sec. 13, T9S, R20E (S)** **NENW, Sec. 13, T9S, R20E (B)**
Well No:	**NBU 920-13C4BS**	**Lease No:**	**UTU-0579**
API No:	**43-047-50524**	**Agreement:**	**Natural Buttes Unit**

OFFICE NUMBER: (435) 781-4400
OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

Site-Specific Conditions of Approval:

1. Paint facilities "shadow gray."
2. Construct diversion drainages around well pad.
3. Monitor location by a permitted archaeologist during the construction process.
4. Monitor by a permitted paleontologist during construction.
5. If project construction operations are scheduled to occur after December 31, 2009, a raptor survey shall be conducted prior to construction of the proposed locations, pipelines, or access roads if construction will take place during raptor nesting season (January 1 through September 30).
6. If construction will occur in 2009, avoid an active burrowing owl nest with a ¼-mile buffer between March 1 and August 31. No avoidance buffer is recommended for inactive nests or for construction activities conducted outside of these dates.
7. If project construction operation are scheduled to occur after June 15, 2010, KMG will conduct additional biological surveys in accordance with the guidelines specified I the USFWS Rare Plant Conservation Measures for Uinta Basin hookless cactus (See Appendix D) and conduct its operation according to its specifications.

BIA Standard Conditions of Approval:

1. Soil erosion will be mitigated by reseeding all disturbed areas.
2. The gathering pipelines will be constructed to lie on the surface. The surface pipelines will not be bladed or cleared of vegetation. Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the right-of-way. Where pipelines do not parallel roads but cross-country between sites, they shall be welded in place at well sites or on access roads and then pulled between stations with a suitable piece of equipment. Traffic will be restricted along these areas so that the pipeline right-of-way will not be used as an access road.
3. An open drilling system shall be used, unless otherwise specified in 10.0 Additional Stipulations of this document and in the Application for Permit to Drill. A closed drilling system shall be sued in all flood plain areas, and other highly sensitive areas, recommended by the Ute Tribe Technician, BIA, and other agencies involved.
4. The reserve pit shall be lined with a synthetic leak proof liner. After the drilling operation is complete, excess fluids shall be removed from the reserve pit and either hauled to an approved disposal site or shall be used to drill other wells. When the fluids are removed the pit shall be backfilled a minimum of 3.0' below the soil surface elevation.
5. A closed production system shall be used. This means all produced water and oil field fluid wastes shall be contained in leak proof tanks. These fluids shall be disposed of in either approved injection wells or disposal pits.
6. Major low water crossings will be armored with pit run material to protect them from erosion.
7. All personnel shall refrain from collecting any paleontological fossils and from disturbing any fossil resources in the area.
8. If fossils are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

9. Before the site is abandoned the company will be required to restore the right-of-way to near its original state. The disturbed area will be reseeded with desirable perennial vegetation. If necessary, the Bureau of Indian Affairs or Bureau of Land Management will provide a suitable seed mixture.
10. Noxious weeds will be controlled on all surface disturbances within the project area. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.
11. If project construction operations are scheduled to occur after December 31, 2009, KMG shall conduct annual raptor surveys in accordance with the guidelines specified in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, 2002 (See Appendix E) and conduct its operations according to applicable seasonal restrictions and spatial offsets.
12. USFWS threatened and endangered plant and animal conservation measures will be followed, as appropriate to the species identified by the biological resource survey (See Appendix E).
13. All personnel shall refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
14. If artifacts or any culturally sensitive materials are exposed or identified during construction, all construction must cease and immediate notification to the Energy and Minerals Department and the Cultural Rights Protection Officer.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/8/2010	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the surface casing size for this well from FROM: 9-5/8" TO: 8-5/8". The production casing will still be cemented it's entire length to the surface. Please see the attached drilling program for additional details. All other information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: March 08, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 3/4/2010

RECEIVED March 04, 2010

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	March 4, 2010
WELL NAME	**NBU 920-13C4BS**			TD	10,670' TVD 10,727' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,710'
SURFACE LOCATION	NE/4 NW/4	405' FNL	2,146' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.041635	Longitude:	-109.617107		NAD 83	
BTM HOLE LOCATION	NE/4 NW/4	920' FNL	2,100' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.040220	Longitude:	-109.617269		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), Ute Tribe (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		20'	14"		
			11"	8-5/8", 28#, J-55, LTC	Air mist

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @	1,730'
Top of Birds Nest @	1,987
Mahogany @	2,497
Preset f/ GL @	2,650' MD

Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

Wasatch @	5,144'
Mverde @	8,351' TVD
MVU2 @	9,344' TVD
MVU1 @	9,849' TVD

Mud logging program TBD

Cased hole logging program from TD - surf csg

		7-7/8"	4-1/2" 11.6# P-110/I-80 or equivalent LTCBTC csg	Water / Fresh Water Mud 8.3-12.4 ppg

Max anticipated Mud required 12.4 ppg

TD @ 10,670' TVD 10,727' MD

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3,390	1,880	348,000
SURFACE	8-5/8"	0	to	2,650	28.00	IJ-55	LTC	0.74	1.52	4.64
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	9,707	11.60	I-80	LTC	1.72	0.92	1.85
								10,690	8,650	279,000
	4-1/2"	9,707	to	10,727	11.60	HCP-110	LTC	47.64	1.26	29.09

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,411 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,795 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	TAIL	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	2,150'	65/35 Poz + 6% Gel + 10 pps gilsonite	510	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,637'	Premium Lite II + 3% KCl + 0.25 pps	440	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,090'	50/50 Poz/G + 10% salt + 2% gel	1,490	40%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
Lovel Young

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☑ DRILLING REPORT Report Date: 3/26/2010	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO AIR RIG ON 3/24/2010. DRILLED 11" SURFACE HOLE TO 2780'. RAN 8-5/8" 28# J-55 SURFACE CSG. PUMP 20 BBLS OF GEL WATER LEAD CMT W/210 SX CLASS G HI FILL @ 11.0 PPG, 3.82 YD. TAILED CMT W/175 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON FLY DISPLACE W/ 168.1 BBLS OF H20, 540 PSI OF LIFT. BUMP PLUG W/900 PSI FLOAT HELD. CIRC THROUGH OUT JOB. 20 BBLS LEAD TO SURFACE. TOP OUT THROUGH 1" W/125 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. CEMENT FELL, WILL TOP OUT ON NEXT JOB. WORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 30, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 3/29/2010

RECEIVED March 29, 2010

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 5/11/2010	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2780' TO 10,742' ON MAY 9, 2010. RAN 4 ½" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 750 SX CLASS G ECONOCEM @ 12.5 PPG, 1.98 YD. TAILED CEMENT W/ 1550 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.25 YD. DISPLACED W/ 166 BBLS WATER, BUMPED PLUG. RETURNED 65 BBLS TO SURFACE. RD CEMENTERS AND CLEANED PITS. RELEASED PIONEER RIG # 54 ON MAY 11, 2010 @ 11:00 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
May 12, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 5/12/2010

RECEIVED May 12, 2010

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/8/2010	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the surface casing size for this well from FROM: 9-5/8" TO: 8-5/8". The production casing will still be cemented it's entire length to the surface. Please see the attached drilling program for additional details. All other information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

Accepted by the Utah Division of Oil, Gas and Mining

Date: March 08, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 3/4/2010

RECEIVED March 04, 2010

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	March 4, 2010
WELL NAME	**NBU 920-13C4BS**			TD	10,670' TVD 10,727' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	4,710'
SURFACE LOCATION	NE/4 NW/4	405' FNL	2,146' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.041635	Longitude:	-109.617107		NAD 83	
BTM HOLE LOCATION	NE/4 NW/4	920' FNL	2,100' FWL	Sec 13	T 9S	R 20E	
	Latitude:	40.040220	Longitude:	-109.617269		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), Ute Tribe (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		20'	14"		
			11"	8-5/8", 28#, J-55, LTC	Air mist

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @	1,730'
Top of Birds Nest @	1,987
Mahogany @	2,497
Preset f/ GL @	2,650' MD

Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

Wasatch @	5,144'
Mverde @	8,351' TVD
MVU2 @	9,344' TVD
MVU1 @	9,849' TVD

Mud logging program TBD

Cased hole logging program from TD - surf csg

		7-7/8"	4-1/2" 11.6# P-110/I-80 or equivalent LTCBTC csg	Water / Fresh Water Mud 8.3-12.4 ppg

Max anticipated Mud required 12.4 ppg

TD @ 10,670' TVD 10,727' MD

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3,390	1,880	348,000
SURFACE	8-5/8"	0	to	2,650	28.00	IJ-55	LTC	0.74	1.52	4.64
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	9,707	11.60	I-80	LTC	1.72	0.92	1.85
								10,690	8,650	279,000
	4-1/2"	9,707	to	10,727	11.60	HCP-110	LTC	47.64	1.26	29.09

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,411 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,795 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	TAIL	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	2,150'	65/35 Poz + 6% Gel + 10 pps gilsonite	510	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,637'	Premium Lite II + 3% KCl + 0.25 pps	440	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,090'	50/50 Poz/G + 10% salt + 2% gel	1,490	40%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
Lovel Young

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 3/10/2010	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION ON 3/10/2010 AT 12:00 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 15, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 3/11/2010

RECEIVED March 11, 2010

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☑ DRILLING REPORT Report Date: 3/26/2010	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO AIR RIG ON 3/24/2010. DRILLED 11" SURFACE HOLE TO 2780'. RAN 8-5/8" 28# J-55 SURFACE CSG. PUMP 20 BBLS OF GEL WATER LEAD CMT W/210 SX CLASS G HI FILL @ 11.0 PPG, 3.82 YD. TAILED CMT W/175 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG ON FLY DISPLACE W/ 168.1 BBLS OF H20, 540 PSI OF LIFT. BUMP PLUG W/900 PSI FLOAT HELD. CIRC THROUGH OUT JOB. 20 BBLS LEAD TO SURFACE. TOP OUT THROUGH 1" W/125 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. CEMENT FELL, WILL TOP OUT ON NEXT JOB. WORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 30, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 3/29/2010

RECEIVED March 29, 2010

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 9/9/2010	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON SEPTEMBER 9, 2010 AT 8:30 A.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining

FOR RECORD ONLY

September 09, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE N/A		**DATE** 9/9/2010

RECEIVED September 09, 2010

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU0579

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU63047A

2. Name of Operator KERR-MCGEE OIL&GAS ONSHORE LP Contact: GINA T BECKER E-Mail: GINA.BECKER@ANADARKO.COM

8. Lease Name and Well No. NBU 920-13C4BS

3. Address P.O. BOX 173779 DENVER, CO 80217

3a. Phone No. (include area code) Ph: 720-929-6086

9. API Well No. 43-047-50524

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface NENW 405FNL 2146FWL 40.04163 N Lat, 109.61711 W Lon

At top prod interval reported below NENW 912FNL 2118FWL

At total depth NENW 939FNL 2108FWL

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 13 T9S R20E Mer SLB

12. County or Parish UINTAH

13. State UT

14. Date Spudded 03/10/2010

15. Date T.D. Reached 05/09/2010

16. Date Completed ☐ D & A ☒ Ready to Prod. 09/09/2010

17. Elevations (DF, KB, RT, GL)* 4710 GL

18. Total Depth: MD 10742 TVD 10690

19. Plug Back T.D.: MD 10693 TVD 10641

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GR/CBL-HDIL/ZDL/CNGR

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 J55	36.7		40		28			
11.000	8.625 IJ55	28.0		2753		510			
7.875	4.500 L80	11.6		10737		2300			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	10027							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	WASATCH	8440	8442	8440 TO 8442	0.360	6	OPEN
B)	MESAVERDE	8468	10632	8468 TO 10632	0.360	254	OPEN
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8440 TO 10632	PUMP 8,964 BBLS SLICK H2O & 329,895 LBS 30/50 SAND.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/09/2010	09/29/2010	24	→	0.0	2644.0	99.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	1895 SI	2699.0	→	0	2644	99		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #94597 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

RECEIVED
OCT 19 2010
DIV. OF OIL, GAS & MINING

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
NO MEASURABLE GAS

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
GREEN RIVER	1736				
BIRD'S NEST	1878				
MAHOGANY	2541				
WASATCH	5210				
MESAVERDE	8466	10742			

32. Additional remarks (include plugging procedure):
DRILLING/COMPLETION CHRONOS AND DIRECTIONAL SURVEY ATTACHED.
COMPLETION CHRONO DETAILS INDIVIDUAL FRAC STAGES.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #94597 Verified by the BLM Well Information System.
For KERR-MCGEE OIL&GAS ONSHORE,L.P, sent to the Vernal

Name *(please print)* GINA T BECKER Title REGULATORY ANALYST II

Signature (Electronic Submission) Date 10/12/2010

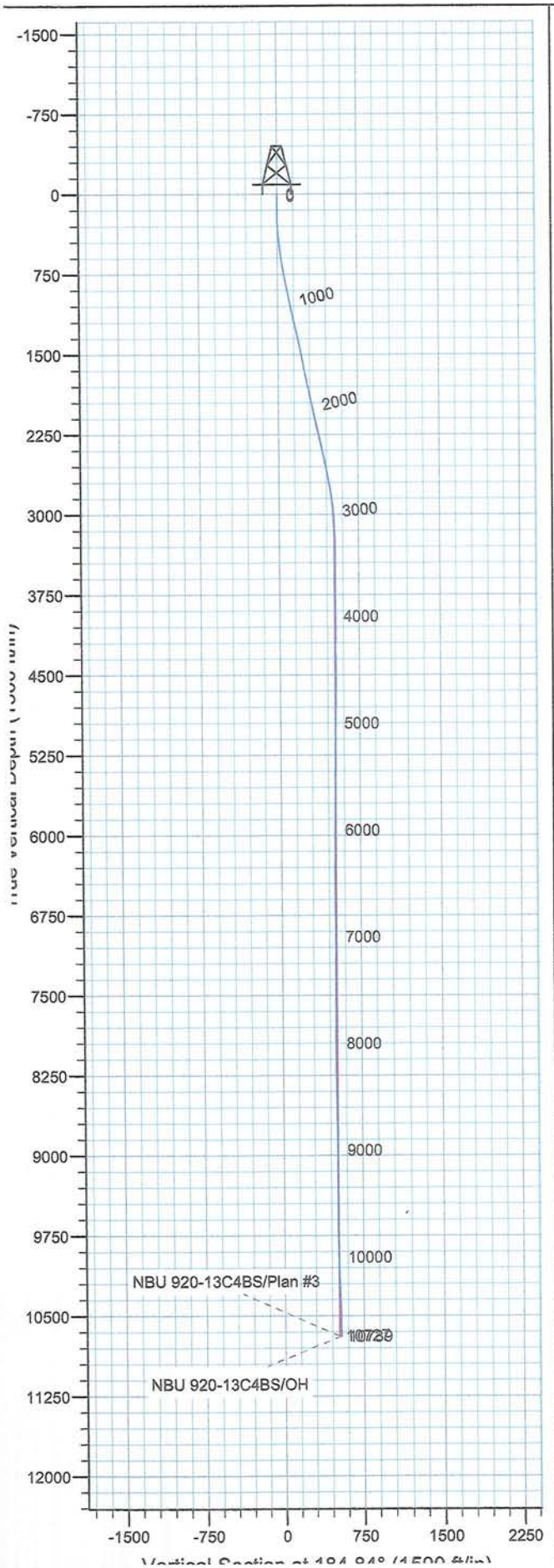
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

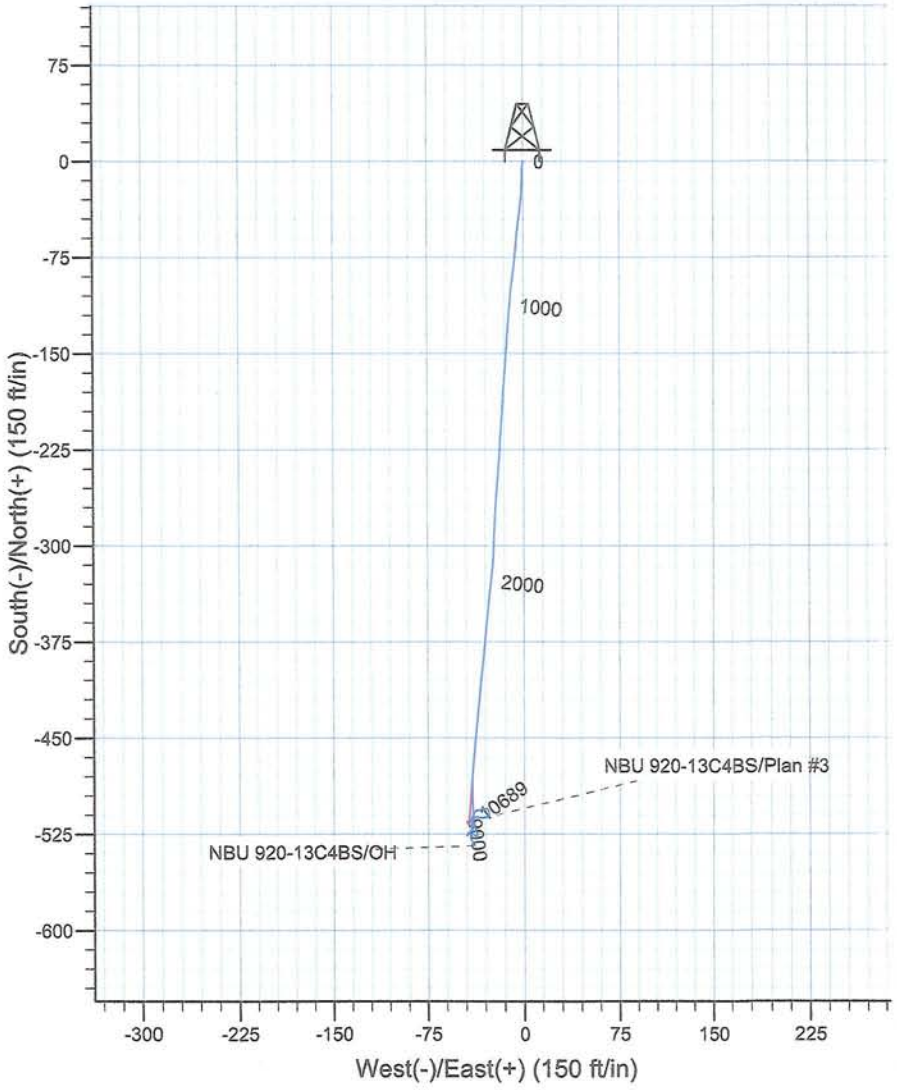
**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT UTM12
Site: NBU 920-13C Pad
Well: NBU 920-13C4BS
Wellbore: OH
Design: OH

Kerr McGee Oil and Gas Onshore LP





WELL DETAILS: NBU 920-13C4BS

Ground Level: GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14544226.69	2027671.79	40° 2' 30.016 N	109° 36' 59.098 W

REFERENCE INFORMATION

Co-ordinate (N/E) Reference:	Well NBU 920-13C4BS, True North
Vertical (TVD) Reference:	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 5
Section (VS) Reference:	Slot - (0.00N, 0.00E)
Measured Depth Reference:	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 5
Calculation Method:	Minimum Curvature
Local North:	True
Location:	Sec 13 T9S R20E

PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)

Design: OH (NBU 920-13C4BS/OH)

Created By: Rex Hall Date: 2010-07-06

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12
NBU 920-13C Pad
NBU 920-13C4BS
OH

Design: OH

Standard Survey Report

06 July, 2010

Anadarko
Petroleum Corporation

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 920-13C Pad, Sec 13 T9S R20E				
Site Position:		**Northing:**	14,544,260.53 ft	**Latitude:**	40° 2' 30.347 N
From:	Lat/Long	**Easting:**	2,027,693.10 ft	**Longitude:**	109° 36' 58.817 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.89 °

Well	NBU 920-13C4BS, 405' FNL & 2146' FWL					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,544,226.69 ft	**Latitude:**	40° 2' 30.016 N
	+E/-W	0.00 ft	**Easting:**	2,027,671.79 ft	**Longitude:**	109° 36' 59.098 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,710.00 ft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	2010/04/09	11.28	65.91	52,455

Design	OH				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	15.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	15.00	0.00	0.00	184.84	

Survey Program **Date** 2010/07/06

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
104.00	2,734.00	Survey #1 - Surface MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1
2,770.00	10,742.00	Survey #2 - Production MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
104.00	0.20	323.53	104.00	0.12	-0.09	-0.12	0.22	0.22	0.00
First SDI Surface MWD Survey									
133.00	0.35	231.66	133.00	0.11	-0.19	-0.09	1.41	0.52	-316.79
162.00	0.74	195.80	162.00	-0.12	-0.31	0.15	1.73	1.34	-123.66
193.00	1.16	193.34	192.99	-0.62	-0.44	0.66	1.36	1.35	-7.94
223.00	1.79	183.88	222.98	-1.39	-0.54	1.43	2.24	2.10	-31.53
250.00	2.12	189.45	249.97	-2.30	-0.65	2.35	1.41	1.22	20.63
279.00	2.53	186.45	278.94	-3.46	-0.81	3.52	1.47	1.41	-10.34
309.00	3.03	180.23	308.91	-4.91	-0.89	4.97	1.94	1.67	-20.73
338.00	3.67	179.95	337.86	-6.61	-0.89	6.66	2.21	2.21	-0.97
367.00	4.32	179.44	366.79	-8.63	-0.88	8.67	2.24	2.24	-1.76

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
395.00	4.70	183.92	394.70	-10.83	-0.95	10.87	1.85	1.36	16.00
425.00	5.15	181.32	424.59	-13.40	-1.06	13.44	1.67	1.50	-8.67
455.00	5.58	181.33	454.46	-16.21	-1.13	16.24	1.43	1.43	0.03
484.00	6.11	182.51	483.31	-19.16	-1.23	19.19	1.87	1.83	4.07
514.00	6.99	183.64	513.11	-22.57	-1.41	22.61	2.96	2.93	3.77
544.00	7.18	184.87	542.88	-26.26	-1.69	26.31	0.81	0.63	4.10
574.00	7.51	184.72	572.64	-30.09	-2.01	30.15	1.10	1.10	-0.50
604.00	8.09	186.98	602.36	-34.13	-2.43	34.22	2.19	1.93	7.53
634.00	8.55	186.97	632.04	-38.44	-2.95	38.56	1.53	1.53	-0.03
664.00	8.94	187.42	661.70	-42.97	-3.53	43.11	1.32	1.30	1.50
694.00	9.43	186.27	691.31	-47.72	-4.10	47.90	1.74	1.63	-3.83
724.00	9.85	186.53	720.89	-52.72	-4.66	52.92	1.41	1.40	0.87
754.00	10.23	185.94	750.43	-57.91	-5.22	58.15	1.31	1.27	-1.97
784.00	10.52	183.94	779.94	-63.30	-5.69	63.55	1.54	0.97	-6.67
814.00	10.79	185.51	809.42	-68.82	-6.15	69.10	1.32	0.90	5.23
844.00	11.10	186.84	838.87	-74.49	-6.76	74.79	1.33	1.03	4.43
874.00	11.48	185.84	868.29	-80.32	-7.41	80.66	1.42	1.27	-3.33
904.00	12.17	187.58	897.66	-86.43	-8.13	86.81	2.59	2.30	5.80
934.00	12.57	187.23	926.96	-92.80	-8.96	93.23	1.36	1.33	-1.17
964.00	12.80	187.14	956.23	-99.34	-9.78	99.81	0.77	0.77	-0.30
1,054.00	12.89	184.50	1,043.98	-119.24	-11.81	119.81	0.66	0.10	-2.93
1,144.00	12.72	182.62	1,131.74	-139.14	-13.05	139.75	0.50	-0.19	-2.09
1,234.00	12.36	185.52	1,219.59	-158.63	-14.43	159.28	0.81	-0.40	3.22
1,324.00	11.83	182.38	1,307.59	-177.43	-15.74	178.13	0.94	-0.59	-3.49
1,414.00	11.23	184.41	1,395.78	-195.39	-16.79	196.11	0.80	-0.67	2.26
1,504.00	11.53	183.72	1,484.01	-213.10	-18.05	213.87	0.37	0.33	-0.77
1,594.00	11.66	183.87	1,572.17	-231.15	-19.25	231.95	0.15	0.14	0.17
1,684.00	12.03	185.37	1,660.26	-249.56	-20.74	250.42	0.53	0.41	1.67
1,774.00	12.29	183.49	1,748.24	-268.46	-22.20	269.38	0.53	0.29	-2.09
1,864.00	12.81	181.90	1,836.09	-288.00	-23.11	288.92	0.69	0.58	-1.77
1,954.00	12.86	182.79	1,923.84	-307.97	-23.93	308.89	0.23	0.06	0.99
2,044.00	12.12	186.87	2,011.71	-327.36	-25.55	328.35	1.28	-0.82	4.53
2,134.00	12.21	185.84	2,099.69	-346.21	-27.65	347.30	0.26	0.10	-1.14
2,224.00	12.80	184.90	2,187.55	-365.61	-29.47	366.79	0.69	0.66	-1.04
2,314.00	12.45	185.89	2,275.38	-385.19	-31.32	386.46	0.46	-0.39	1.10
2,404.00	11.85	186.43	2,363.36	-404.02	-33.35	405.40	0.68	-0.67	0.60
2,494.00	11.65	184.33	2,451.48	-422.27	-35.07	423.72	0.52	-0.22	-2.33
2,584.00	11.03	186.41	2,539.72	-439.88	-36.71	441.41	0.83	-0.69	2.31
2,674.00	10.96	186.08	2,628.07	-456.95	-38.58	458.57	0.10	-0.08	-0.37
2,734.00	10.72	184.33	2,687.00	-468.18	-39.61	469.86	0.68	-0.40	-2.92
Last SDI Surface MWD Survey									
2,770.00	10.75	184.36	2,722.37	-474.87	-40.12	476.56	0.08	0.08	0.08
First SDI Production MWD Survey									
2,865.00	8.41	179.51	2,816.04	-490.65	-40.73	492.34	2.60	-2.46	-5.11
2,959.00	6.78	177.03	2,909.21	-503.07	-40.38	504.68	1.77	-1.73	-2.64
3,054.00	5.36	174.89	3,003.67	-513.09	-39.70	514.61	1.51	-1.49	-2.25
3,149.00	3.90	160.38	3,098.36	-520.55	-38.22	521.92	1.96	-1.54	-15.27
3,244.00	1.99	172.11	3,193.23	-525.23	-36.91	526.47	2.10	-2.01	12.35
3,339.00	0.55	220.19	3,288.21	-527.21	-36.97	528.45	1.76	-1.52	50.61
3,433.00	0.94	317.14	3,382.21	-526.99	-37.79	528.30	1.22	0.41	103.14
3,528.00	0.86	292.75	3,477.19	-526.14	-38.98	527.56	0.41	-0.08	-25.67
3,623.00	0.76	270.35	3,572.18	-525.87	-40.26	527.39	0.35	-0.11	-23.58
3,718.00	0.66	342.57	3,667.18	-525.34	-41.06	526.93	0.88	-0.11	76.02
3,813.00	0.37	319.53	3,762.18	-524.58	-41.42	526.21	0.37	-0.31	-24.25

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,908.00	0.23	247.45	3,857.17	-524.42	-41.80	526.08	0.39	-0.15	-75.87
4,002.00	0.03	287.49	3,951.17	-524.49	-41.99	526.16	0.22	-0.21	42.60
4,097.00	0.27	164.74	4,046.17	-524.70	-41.96	526.37	0.30	0.25	-129.21
4,192.00	0.83	329.96	4,141.17	-524.32	-42.24	526.01	1.15	0.59	173.92
4,287.00	0.43	281.27	4,236.17	-523.65	-42.94	525.41	0.67	-0.42	-51.25
4,382.00	0.38	209.30	4,331.16	-523.86	-43.44	525.65	0.50	-0.05	-75.76
4,476.00	1.17	214.12	4,425.15	-524.92	-44.13	526.78	0.84	0.84	5.13
4,571.00	0.53	212.46	4,520.14	-526.10	-44.91	528.01	0.67	-0.67	-1.75
4,666.00	1.25	52.15	4,615.14	-525.83	-44.33	527.70	1.85	0.76	-168.75
4,761.00	1.07	36.39	4,710.12	-524.48	-42.99	526.24	0.38	-0.19	-16.59
4,855.00	0.79	51.11	4,804.11	-523.37	-41.96	525.04	0.39	-0.30	15.66
4,950.00	0.55	65.24	4,899.10	-522.77	-41.04	524.37	0.30	-0.25	14.87
5,045.00	1.24	358.17	4,994.09	-521.55	-40.66	523.12	1.20	0.73	-70.60
5,140.00	1.24	2.08	5,089.07	-519.49	-40.65	521.07	0.09	0.00	4.12
5,234.00	0.99	354.99	5,183.05	-517.67	-40.69	519.26	0.30	-0.27	-7.54
5,361.00	0.81	351.64	5,310.03	-515.69	-40.91	517.30	0.15	-0.14	-2.64
5,424.00	0.71	350.04	5,373.03	-514.86	-41.04	516.49	0.16	-0.16	-2.54
5,519.00	0.55	351.77	5,468.02	-513.83	-41.21	515.48	0.17	-0.17	1.82
5,613.00	0.49	7.70	5,562.02	-512.99	-41.22	514.64	0.17	-0.06	16.95
5,708.00	0.45	17.23	5,657.02	-512.23	-41.06	513.87	0.09	-0.04	10.03
5,803.00	0.19	12.85	5,752.01	-511.72	-40.91	513.35	0.27	-0.27	-4.61
5,898.00	0.24	108.84	5,847.01	-511.63	-40.69	513.24	0.34	0.05	101.04
5,993.00	1.02	16.21	5,942.01	-510.88	-40.26	512.46	1.11	0.82	-97.51
6,088.00	0.84	33.22	6,037.00	-509.49	-39.65	511.01	0.34	-0.19	17.91
6,183.00	0.69	24.63	6,131.99	-508.38	-39.03	509.86	0.20	-0.16	-9.04
6,278.00	0.54	32.80	6,226.98	-507.49	-38.55	508.93	0.18	-0.16	8.60
6,373.00	0.65	70.09	6,321.98	-506.93	-37.80	508.31	0.42	0.12	39.25
6,468.00	0.62	78.84	6,416.97	-506.64	-36.79	507.94	0.11	-0.03	9.21
6,563.00	0.60	93.63	6,511.97	-506.58	-35.78	507.79	0.17	-0.02	15.57
6,657.00	0.54	102.63	6,605.96	-506.70	-34.86	507.84	0.11	-0.06	9.57
6,752.00	0.43	136.62	6,700.96	-507.06	-34.18	508.14	0.32	-0.12	35.78
6,847.00	0.57	142.29	6,795.95	-507.69	-33.65	508.72	0.16	0.15	5.97
6,942.00	0.61	324.50	6,890.95	-507.66	-33.65	508.69	1.24	0.04	-187.15
7,036.00	0.38	326.29	6,984.95	-506.99	-34.11	508.06	0.25	-0.24	1.90
7,131.00	0.20	333.94	7,079.95	-506.58	-34.36	507.67	0.19	-0.19	8.05
7,226.00	0.14	300.43	7,174.95	-506.37	-34.53	507.48	0.12	-0.06	-35.27
7,321.00	0.08	122.88	7,269.95	-506.35	-34.58	507.46	0.23	-0.06	-186.89
7,416.00	0.30	122.00	7,364.95	-506.52	-34.31	507.61	0.23	0.23	-0.93
7,511.00	0.50	33.21	7,459.94	-506.30	-33.87	507.35	0.61	0.21	-93.46
7,606.00	0.45	34.59	7,554.94	-505.65	-33.44	506.67	0.05	-0.05	1.45
7,700.00	0.28	92.62	7,648.94	-505.35	-33.00	506.34	0.41	-0.18	61.73
7,795.00	0.38	52.42	7,743.94	-505.17	-32.51	506.12	0.26	0.11	-42.32
7,890.00	0.38	115.04	7,838.94	-505.11	-31.98	506.01	0.42	0.00	65.92
7,985.00	0.53	100.56	7,933.93	-505.33	-31.26	506.16	0.20	0.16	-15.24
8,080.00	0.44	100.49	8,028.93	-505.47	-30.47	506.24	0.09	-0.09	-0.07
8,172.00	0.52	102.01	8,120.93	-505.63	-29.72	506.33	0.09	0.09	1.65
8,267.00	0.53	107.21	8,215.92	-505.85	-28.87	506.48	0.05	0.01	5.47
8,362.00	0.48	169.09	8,310.92	-506.37	-28.38	506.96	0.55	-0.05	65.14
8,457.00	0.65	157.01	8,405.92	-507.25	-28.09	507.82	0.22	0.18	-12.72
8,552.00	0.72	169.32	8,500.91	-508.34	-27.77	508.87	0.17	0.07	12.96
8,647.00	0.90	174.41	8,595.90	-509.66	-27.59	510.18	0.20	0.19	5.36
8,742.00	0.79	200.31	8,690.89	-511.02	-27.74	511.54	0.41	-0.12	27.26
8,837.00	0.87	269.54	8,785.88	-511.64	-28.69	512.24	1.00	0.08	72.87
8,932.00	0.87	253.73	8,880.87	-511.85	-30.11	512.57	0.25	0.00	-16.64

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,027.00	0.92	257.98	8,975.86	-512.21	-31.54	513.05	0.09	0.05	4.47
9,122.00	0.72	278.54	9,070.85	-512.28	-32.88	513.23	0.37	-0.21	21.64
9,216.00	0.72	269.18	9,164.84	-512.20	-34.06	513.25	0.12	0.00	-9.96
9,311.00	0.70	279.47	9,259.83	-512.11	-35.22	513.26	0.14	-0.02	10.83
9,406.00	0.68	281.75	9,354.83	-511.90	-36.35	513.15	0.04	-0.02	2.40
9,501.00	0.62	271.10	9,449.82	-511.78	-37.41	513.11	0.14	-0.06	-11.21
9,596.00	0.69	257.97	9,544.82	-511.89	-38.49	513.31	0.17	0.07	-13.82
9,691.00	0.68	232.93	9,639.81	-512.35	-39.50	513.85	0.31	-0.01	-26.36
9,786.00	0.65	206.71	9,734.80	-513.17	-40.19	514.73	0.32	-0.03	-27.60
9,881.00	0.73	186.27	9,829.80	-514.25	-40.50	515.84	0.27	0.08	-21.52
9,975.00	1.16	197.29	9,923.78	-515.76	-40.85	517.36	0.49	0.46	11.72
10,070.00	1.22	187.18	10,018.76	-517.68	-41.26	519.31	0.23	0.06	-10.64
10,164.00	1.52	182.89	10,112.74	-519.91	-41.45	521.56	0.34	0.32	-4.56
10,259.00	1.44	189.44	10,207.70	-522.35	-41.71	524.01	0.20	-0.08	6.89
10,354.00	1.44	189.95	10,302.67	-524.70	-42.11	526.39	0.01	0.00	0.54
10,449.00	1.58	170.76	10,397.64	-527.17	-42.10	528.85	0.55	0.15	-20.20
10,543.00	1.36	167.90	10,491.61	-529.54	-41.66	531.17	0.25	-0.23	-3.04
10,638.00	1.40	140.29	10,586.58	-531.54	-40.68	533.08	0.69	0.04	-29.06
10,687.00	1.73	146.61	10,635.57	-532.62	-39.89	534.08	0.76	0.67	12.90
Last SDI Production MWD Survey									
10,742.00	1.73	146.61	10,690.54	-534.00	-38.98	535.39	0.00	0.00	0.00
Projection To TD									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 920-13C4BS PBHL	0.00	0.00	10,689.00	-515.71	-45.07	14,543,710.34	2,027,634.74	40° 2' 24.918 N	109° 36' 59.677 W
- actual wellpath misses target center by 19.23ft at 10739.90ft MD (10688.44 TVD, -533.95 N, -39.02 E)									
- Circle (radius 25.00)									

Checked By: _____ Approved By: _____ Date: _____

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12
NBU 920-13C Pad
NBU 920-13C4BS
OH

Design: OH

Survey Report - Geographic

06 July, 2010

Anadarko
Petroleum Corporation

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 920-13C Pad, Sec 13 T9S R20E				
Site Position:		**Northing:**	14,544,260.53 ft	**Latitude:**	40° 2' 30.347 N
From:	Lat/Long	**Easting:**	2,027,693.10 ft	**Longitude:**	109° 36' 58.817 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.89 °

Well	NBU 920-13C4BS, 405' FNL & 2146' FWL					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,544,226.69 ft	**Latitude:**	40° 2' 30.016 N
	+E/-W	0.00 ft	**Easting:**	2,027,671.79 ft	**Longitude:**	109° 36' 59.098 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,710.00 ft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	2010/04/09	11.28	65.91	52,455

Design	OH				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	15.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	15.00	0.00	0.00	184.84	

Survey Program **Date** 2010/07/06

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
104.00	2,734.00	Survey #1 - Surface MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1
2,770.00	10,742.00	Survey #2 - Production MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
15.00	0.00	0.00	15.00	0.00	0.00	14,544,226.69	2,027,671.79	40° 2' 30.016 N	109° 36' 59.098 W
104.00	0.20	323.53	104.00	0.12	-0.09	14,544,226.81	2,027,671.69	40° 2' 30.017 N	109° 36' 59.099 W
First SDI Surface MWD Survey									
133.00	0.35	231.66	133.00	0.11	-0.19	14,544,226.79	2,027,671.60	40° 2' 30.017 N	109° 36' 59.100 W
162.00	0.74	195.80	162.00	-0.12	-0.31	14,544,226.56	2,027,671.48	40° 2' 30.014 N	109° 36' 59.102 W
193.00	1.16	193.34	192.99	-0.62	-0.44	14,544,226.06	2,027,671.36	40° 2' 30.009 N	109° 36' 59.103 W
223.00	1.79	183.88	222.98	-1.39	-0.54	14,544,225.29	2,027,671.27	40° 2' 30.002 N	109° 36' 59.105 W
250.00	2.12	189.45	249.97	-2.30	-0.65	14,544,224.38	2,027,671.17	40° 2' 29.993 N	109° 36' 59.106 W
279.00	2.53	186.45	278.94	-3.46	-0.81	14,544,223.21	2,027,671.03	40° 2' 29.981 N	109° 36' 59.108 W
309.00	3.03	180.23	308.91	-4.91	-0.89	14,544,221.76	2,027,670.98	40° 2' 29.967 N	109° 36' 59.109 W
338.00	3.67	179.95	337.86	-6.61	-0.89	14,544,220.06	2,027,671.00	40° 2' 29.950 N	109° 36' 59.109 W
367.00	4.32	179.44	366.79	-8.63	-0.88	14,544,218.04	2,027,671.04	40° 2' 29.930 N	109° 36' 59.109 W
395.00	4.70	183.92	394.70	-10.83	-0.95	14,544,215.84	2,027,671.01	40° 2' 29.909 N	109° 36' 59.110 W
425.00	5.15	181.32	424.59	-13.40	-1.06	14,544,213.27	2,027,670.93	40° 2' 29.883 N	109° 36' 59.111 W
455.00	5.58	181.33	454.46	-16.21	-1.13	14,544,210.46	2,027,670.91	40° 2' 29.855 N	109° 36' 59.112 W
484.00	6.11	182.51	483.31	-19.16	-1.23	14,544,207.51	2,027,670.86	40° 2' 29.826 N	109° 36' 59.113 W
514.00	6.99	183.64	513.11	-22.57	-1.41	14,544,204.09	2,027,670.73	40° 2' 29.792 N	109° 36' 59.116 W
544.00	7.18	184.87	542.88	-26.26	-1.69	14,544,200.40	2,027,670.51	40° 2' 29.756 N	109° 36' 59.119 W
574.00	7.51	184.72	572.64	-30.09	-2.01	14,544,196.57	2,027,670.25	40° 2' 29.718 N	109° 36' 59.123 W
604.00	8.09	186.98	602.36	-34.13	-2.43	14,544,192.52	2,027,669.89	40° 2' 29.678 N	109° 36' 59.129 W
634.00	8.55	186.97	632.04	-38.44	-2.95	14,544,188.20	2,027,669.43	40° 2' 29.636 N	109° 36' 59.136 W
664.00	8.94	187.42	661.70	-42.97	-3.53	14,544,183.67	2,027,668.93	40° 2' 29.591 N	109° 36' 59.143 W
694.00	9.43	186.27	691.31	-47.72	-4.10	14,544,178.90	2,027,668.44	40° 2' 29.544 N	109° 36' 59.150 W
724.00	9.85	186.53	720.89	-52.72	-4.66	14,544,173.90	2,027,667.95	40° 2' 29.495 N	109° 36' 59.157 W
754.00	10.23	185.94	750.43	-57.91	-5.22	14,544,168.70	2,027,667.47	40° 2' 29.443 N	109° 36' 59.165 W
784.00	10.52	183.94	779.94	-63.30	-5.69	14,544,163.31	2,027,667.09	40° 2' 29.390 N	109° 36' 59.171 W
814.00	10.79	185.51	809.42	-68.82	-6.15	14,544,157.77	2,027,666.71	40° 2' 29.335 N	109° 36' 59.177 W
844.00	11.10	186.84	838.87	-74.49	-6.76	14,544,152.10	2,027,666.19	40° 2' 29.279 N	109° 36' 59.185 W
874.00	11.48	185.84	868.29	-80.32	-7.41	14,544,146.26	2,027,665.63	40° 2' 29.222 N	109° 36' 59.193 W
904.00	12.17	187.58	897.66	-86.43	-8.13	14,544,140.14	2,027,665.01	40° 2' 29.161 N	109° 36' 59.202 W
934.00	12.57	187.23	926.96	-92.80	-8.96	14,544,133.76	2,027,664.28	40° 2' 29.098 N	109° 36' 59.213 W
964.00	12.80	187.14	956.23	-99.34	-9.78	14,544,127.21	2,027,663.55	40° 2' 29.034 N	109° 36' 59.223 W
1,054.00	12.89	184.50	1,043.98	-119.24	-11.81	14,544,107.28	2,027,661.84	40° 2' 28.837 N	109° 36' 59.249 W
1,144.00	12.72	182.62	1,131.74	-139.14	-13.05	14,544,087.36	2,027,660.91	40° 2' 28.640 N	109° 36' 59.265 W
1,234.00	12.36	185.52	1,219.59	-158.63	-14.43	14,544,067.85	2,027,659.83	40° 2' 28.448 N	109° 36' 59.283 W
1,324.00	11.83	182.38	1,307.59	-177.43	-15.74	14,544,049.03	2,027,658.81	40° 2' 28.262 N	109° 36' 59.300 W
1,414.00	11.23	184.41	1,395.78	-195.39	-16.79	14,544,031.06	2,027,658.03	40° 2' 28.084 N	109° 36' 59.314 W
1,504.00	11.53	183.72	1,484.01	-213.10	-18.05	14,544,013.33	2,027,657.05	40° 2' 27.909 N	109° 36' 59.330 W
1,594.00	11.66	183.87	1,572.17	-231.15	-19.25	14,543,995.26	2,027,656.14	40° 2' 27.731 N	109° 36' 59.345 W
1,684.00	12.03	185.37	1,660.26	-249.56	-20.74	14,543,976.83	2,027,654.93	40° 2' 27.549 N	109° 36' 59.364 W
1,774.00	12.29	183.49	1,748.24	-268.46	-22.20	14,543,957.91	2,027,653.76	40° 2' 27.362 N	109° 36' 59.383 W
1,864.00	12.81	181.90	1,836.09	-288.00	-23.11	14,543,938.36	2,027,653.15	40° 2' 27.169 N	109° 36' 59.395 W
1,954.00	12.86	182.79	1,923.84	-307.97	-23.93	14,543,918.38	2,027,652.65	40° 2' 26.971 N	109° 36' 59.405 W
2,044.00	12.12	186.87	2,011.71	-327.36	-25.55	14,543,898.97	2,027,651.33	40° 2' 26.780 N	109° 36' 59.426 W
2,134.00	12.21	185.84	2,099.69	-346.21	-27.65	14,543,880.09	2,027,649.52	40° 2' 26.593 N	109° 36' 59.453 W
2,224.00	12.80	184.90	2,187.55	-365.61	-29.47	14,543,860.67	2,027,648.00	40° 2' 26.402 N	109° 36' 59.477 W
2,314.00	12.45	185.89	2,275.38	-385.19	-31.32	14,543,841.06	2,027,646.46	40° 2' 26.208 N	109° 36' 59.500 W
2,404.00	11.85	186.43	2,363.36	-404.02	-33.35	14,543,822.19	2,027,644.72	40° 2' 26.022 N	109° 36' 59.526 W
2,494.00	11.65	184.33	2,451.48	-422.27	-35.07	14,543,803.93	2,027,643.29	40° 2' 25.842 N	109° 36' 59.549 W
2,584.00	11.03	186.41	2,539.72	-439.88	-36.71	14,543,786.28	2,027,641.91	40° 2' 25.667 N	109° 36' 59.570 W
2,674.00	10.96	186.08	2,628.07	-456.95	-38.58	14,543,769.19	2,027,640.31	40° 2' 25.499 N	109° 36' 59.594 W
2,734.00	10.72	184.33	2,687.00	-468.18	-39.61	14,543,757.94	2,027,639.46	40° 2' 25.388 N	109° 36' 59.607 W
Last SDI Surface MWD Survey									
2,770.00	10.75	184.36	2,722.37	-474.87	-40.12	14,543,751.25	2,027,639.06	40° 2' 25.322 N	109° 36' 59.613 W
First SDI Production MWD Survey									

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
2,865.00	8.41	179.51	2,816.04	-490.65	-40.73	14,543,735.46	2,027,638.69	40° 2' 25.166 N	109° 36' 59.621 W
2,959.00	6.78	177.03	2,909.21	-503.07	-40.38	14,543,723.05	2,027,639.23	40° 2' 25.043 N	109° 36' 59.617 W
3,054.00	5.36	174.89	3,003.67	-513.09	-39.70	14,543,713.04	2,027,640.07	40° 2' 24.944 N	109° 36' 59.608 W
3,149.00	3.90	160.38	3,098.36	-520.55	-38.22	14,543,705.60	2,027,641.66	40° 2' 24.870 N	109° 36' 59.589 W
3,244.00	1.99	172.11	3,193.23	-525.23	-36.91	14,543,700.95	2,027,643.05	40° 2' 24.824 N	109° 36' 59.572 W
3,339.00	0.55	220.19	3,288.21	-527.21	-36.97	14,543,698.96	2,027,643.01	40° 2' 24.804 N	109° 36' 59.573 W
3,433.00	0.94	317.14	3,382.21	-526.99	-37.79	14,543,699.17	2,027,642.19	40° 2' 24.806 N	109° 36' 59.584 W
3,528.00	0.86	292.75	3,477.19	-526.14	-38.98	14,543,700.00	2,027,640.99	40° 2' 24.815 N	109° 36' 59.599 W
3,623.00	0.76	270.35	3,572.18	-525.87	-40.26	14,543,700.26	2,027,639.70	40° 2' 24.818 N	109° 36' 59.615 W
3,718.00	0.66	342.57	3,667.18	-525.34	-41.06	14,543,700.77	2,027,638.90	40° 2' 24.823 N	109° 36' 59.626 W
3,813.00	0.37	319.53	3,762.18	-524.58	-41.42	14,543,701.52	2,027,638.52	40° 2' 24.830 N	109° 36' 59.630 W
3,908.00	0.23	247.45	3,857.17	-524.42	-41.80	14,543,701.68	2,027,638.15	40° 2' 24.832 N	109° 36' 59.635 W
4,002.00	0.03	287.49	3,951.17	-524.49	-41.99	14,543,701.61	2,027,637.95	40° 2' 24.831 N	109° 36' 59.638 W
4,097.00	0.27	164.74	4,046.17	-524.70	-41.96	14,543,701.40	2,027,637.99	40° 2' 24.829 N	109° 36' 59.637 W
4,192.00	0.83	329.96	4,141.17	-524.32	-42.24	14,543,701.78	2,027,637.70	40° 2' 24.833 N	109° 36' 59.641 W
4,287.00	0.43	281.27	4,236.17	-523.65	-42.94	14,543,702.43	2,027,636.99	40° 2' 24.839 N	109° 36' 59.650 W
4,382.00	0.38	209.30	4,331.16	-523.86	-43.44	14,543,702.22	2,027,636.49	40° 2' 24.837 N	109° 36' 59.656 W
4,476.00	1.17	214.12	4,425.15	-524.92	-44.13	14,543,701.14	2,027,635.82	40° 2' 24.827 N	109° 36' 59.665 W
4,571.00	0.53	212.46	4,520.14	-526.10	-44.91	14,543,699.95	2,027,635.06	40° 2' 24.815 N	109° 36' 59.675 W
4,666.00	1.25	52.15	4,615.14	-525.83	-44.33	14,543,700.23	2,027,635.63	40° 2' 24.818 N	109° 36' 59.668 W
4,761.00	1.07	36.39	4,710.12	-524.48	-42.99	14,543,701.60	2,027,636.96	40° 2' 24.831 N	109° 36' 59.650 W
4,855.00	0.79	51.11	4,804.11	-523.37	-41.96	14,543,702.73	2,027,637.97	40° 2' 24.842 N	109° 36' 59.637 W
4,950.00	0.55	65.24	4,899.10	-522.77	-41.04	14,543,703.35	2,027,638.88	40° 2' 24.848 N	109° 36' 59.625 W
5,045.00	1.24	358.17	4,994.09	-521.55	-40.66	14,543,704.57	2,027,639.24	40° 2' 24.860 N	109° 36' 59.620 W
5,140.00	1.24	2.08	5,089.07	-519.49	-40.65	14,543,706.62	2,027,639.21	40° 2' 24.881 N	109° 36' 59.620 W
5,234.00	0.99	354.99	5,183.05	-517.67	-40.69	14,543,708.45	2,027,639.15	40° 2' 24.899 N	109° 36' 59.621 W
5,361.00	0.81	351.64	5,310.03	-515.69	-40.91	14,543,710.43	2,027,638.89	40° 2' 24.918 N	109° 36' 59.624 W
5,424.00	0.71	350.04	5,373.03	-514.86	-41.04	14,543,711.25	2,027,638.75	40° 2' 24.926 N	109° 36' 59.625 W
5,519.00	0.55	351.77	5,468.02	-513.83	-41.21	14,543,712.28	2,027,638.57	40° 2' 24.937 N	109° 36' 59.628 W
5,613.00	0.49	7.70	5,562.02	-512.99	-41.22	14,543,713.12	2,027,638.54	40° 2' 24.945 N	109° 36' 59.628 W
5,708.00	0.45	17.23	5,657.02	-512.23	-41.06	14,543,713.88	2,027,638.70	40° 2' 24.952 N	109° 36' 59.626 W
5,803.00	0.19	12.85	5,752.01	-511.72	-40.91	14,543,714.39	2,027,638.83	40° 2' 24.957 N	109° 36' 59.624 W
5,898.00	0.24	108.84	5,847.01	-511.63	-40.69	14,543,714.49	2,027,639.06	40° 2' 24.958 N	109° 36' 59.621 W
5,993.00	1.02	16.21	5,942.01	-510.88	-40.26	14,543,715.24	2,027,639.47	40° 2' 24.966 N	109° 36' 59.615 W
6,088.00	0.84	33.22	6,037.00	-509.49	-39.65	14,543,716.65	2,027,640.06	40° 2' 24.979 N	109° 36' 59.607 W
6,183.00	0.69	24.63	6,131.99	-508.38	-39.03	14,543,717.76	2,027,640.67	40° 2' 24.990 N	109° 36' 59.599 W
6,278.00	0.54	32.80	6,226.98	-507.49	-38.55	14,543,718.66	2,027,641.13	40° 2' 24.999 N	109° 36' 59.593 W
6,373.00	0.65	70.09	6,321.98	-506.93	-37.80	14,543,719.23	2,027,641.87	40° 2' 25.005 N	109° 36' 59.584 W
6,468.00	0.62	78.84	6,416.97	-506.64	-36.79	14,543,719.53	2,027,642.88	40° 2' 25.008 N	109° 36' 59.571 W
6,563.00	0.60	93.63	6,511.97	-506.58	-35.78	14,543,719.62	2,027,643.88	40° 2' 25.008 N	109° 36' 59.558 W
6,657.00	0.54	102.63	6,605.96	-506.70	-34.86	14,543,719.50	2,027,644.81	40° 2' 25.007 N	109° 36' 59.546 W
6,752.00	0.43	136.62	6,700.96	-507.06	-34.18	14,543,719.16	2,027,645.49	40° 2' 25.003 N	109° 36' 59.537 W
6,847.00	0.57	142.29	6,795.95	-507.69	-33.65	14,543,718.53	2,027,646.04	40° 2' 24.997 N	109° 36' 59.530 W
6,942.00	0.61	324.50	6,890.95	-507.66	-33.65	14,543,718.57	2,027,646.03	40° 2' 24.998 N	109° 36' 59.530 W
7,036.00	0.38	326.29	6,984.95	-506.99	-34.11	14,543,719.23	2,027,645.56	40° 2' 25.004 N	109° 36' 59.536 W
7,131.00	0.20	333.94	7,079.95	-506.58	-34.36	14,543,719.63	2,027,645.30	40° 2' 25.008 N	109° 36' 59.539 W
7,226.00	0.14	300.43	7,174.95	-506.37	-34.53	14,543,719.84	2,027,645.13	40° 2' 25.010 N	109° 36' 59.542 W
7,321.00	0.08	122.88	7,269.95	-506.35	-34.58	14,543,719.86	2,027,645.08	40° 2' 25.011 N	109° 36' 59.542 W
7,416.00	0.30	122.00	7,364.95	-506.52	-34.31	14,543,719.70	2,027,645.35	40° 2' 25.009 N	109° 36' 59.539 W
7,511.00	0.50	33.21	7,459.94	-506.30	-33.87	14,543,719.92	2,027,645.79	40° 2' 25.011 N	109° 36' 59.533 W
7,606.00	0.45	34.59	7,554.94	-505.65	-33.44	14,543,720.58	2,027,646.21	40° 2' 25.017 N	109° 36' 59.528 W
7,700.00	0.28	92.62	7,648.94	-505.35	-33.00	14,543,720.88	2,027,646.65	40° 2' 25.020 N	109° 36' 59.522 W
7,795.00	0.38	52.42	7,743.94	-505.17	-32.51	14,543,721.07	2,027,647.13	40° 2' 25.022 N	109° 36' 59.516 W
7,890.00	0.38	115.04	7,838.94	-505.11	-31.98	14,543,721.14	2,027,647.66	40° 2' 25.023 N	109° 36' 59.509 W
7,985.00	0.53	100.56	7,933.93	-505.33	-31.26	14,543,720.93	2,027,648.38	40° 2' 25.021 N	109° 36' 59.500 W

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
8,080.00	0.44	100.49	8,028.93	-505.47	-30.47	14,543,720.80	2,027,649.17	40° 2' 25.019 N	109° 36' 59.489 W
8,172.00	0.52	102.01	8,120.93	-505.63	-29.72	14,543,720.66	2,027,649.93	40° 2' 25.018 N	109° 36' 59.480 W
8,267.00	0.53	107.21	8,215.92	-505.85	-28.87	14,543,720.45	2,027,650.78	40° 2' 25.015 N	109° 36' 59.469 W
8,362.00	0.48	169.09	8,310.92	-506.37	-28.38	14,543,719.94	2,027,651.28	40° 2' 25.010 N	109° 36' 59.463 W
8,457.00	0.65	157.01	8,405.92	-507.25	-28.09	14,543,719.06	2,027,651.58	40° 2' 25.002 N	109° 36' 59.459 W
8,552.00	0.72	169.32	8,500.91	-508.34	-27.77	14,543,717.98	2,027,651.92	40° 2' 24.991 N	109° 36' 59.455 W
8,647.00	0.90	174.41	8,595.90	-509.66	-27.59	14,543,716.65	2,027,652.12	40° 2' 24.978 N	109° 36' 59.452 W
8,742.00	0.79	200.31	8,690.89	-511.02	-27.74	14,543,715.30	2,027,651.99	40° 2' 24.964 N	109° 36' 59.454 W
8,837.00	0.87	269.54	8,785.88	-511.64	-28.69	14,543,714.66	2,027,651.05	40° 2' 24.958 N	109° 36' 59.467 W
8,932.00	0.87	253.73	8,880.87	-511.85	-30.11	14,543,714.43	2,027,649.64	40° 2' 24.956 N	109° 36' 59.485 W
9,027.00	0.92	257.98	8,975.86	-512.21	-31.54	14,543,714.05	2,027,648.21	40° 2' 24.953 N	109° 36' 59.503 W
9,122.00	0.72	278.54	9,070.85	-512.28	-32.88	14,543,713.96	2,027,646.87	40° 2' 24.952 N	109° 36' 59.520 W
9,216.00	0.72	269.18	9,164.84	-512.20	-34.06	14,543,714.02	2,027,645.70	40° 2' 24.953 N	109° 36' 59.536 W
9,311.00	0.70	279.47	9,259.83	-512.11	-35.22	14,543,714.09	2,027,644.53	40° 2' 24.954 N	109° 36' 59.551 W
9,406.00	0.68	281.75	9,354.83	-511.90	-36.35	14,543,714.28	2,027,643.40	40° 2' 24.956 N	109° 36' 59.565 W
9,501.00	0.62	271.10	9,449.82	-511.78	-37.41	14,543,714.39	2,027,642.33	40° 2' 24.957 N	109° 36' 59.579 W
9,596.00	0.69	257.97	9,544.82	-511.89	-38.49	14,543,714.26	2,027,641.26	40° 2' 24.956 N	109° 36' 59.593 W
9,691.00	0.68	232.93	9,639.81	-512.35	-39.50	14,543,713.79	2,027,640.26	40° 2' 24.951 N	109° 36' 59.606 W
9,786.00	0.65	206.71	9,734.80	-513.17	-40.19	14,543,712.96	2,027,639.58	40° 2' 24.943 N	109° 36' 59.614 W
9,881.00	0.73	186.27	9,829.80	-514.25	-40.50	14,543,711.87	2,027,639.29	40° 2' 24.932 N	109° 36' 59.618 W
9,975.00	1.16	197.29	9,923.78	-515.76	-40.85	14,543,710.36	2,027,638.96	40° 2' 24.918 N	109° 36' 59.623 W
10,070.00	1.22	187.18	10,018.76	-517.68	-41.26	14,543,708.43	2,027,638.58	40° 2' 24.899 N	109° 36' 59.628 W
10,164.00	1.52	182.89	10,112.74	-519.91	-41.45	14,543,706.19	2,027,638.43	40° 2' 24.876 N	109° 36' 59.631 W
10,259.00	1.44	189.44	10,207.70	-522.35	-41.71	14,543,703.75	2,027,638.20	40° 2' 24.852 N	109° 36' 59.634 W
10,354.00	1.44	189.95	10,302.67	-524.70	-42.11	14,543,701.39	2,027,637.84	40° 2' 24.829 N	109° 36' 59.639 W
10,449.00	1.58	170.76	10,397.64	-527.17	-42.10	14,543,698.92	2,027,637.88	40° 2' 24.805 N	109° 36' 59.639 W
10,543.00	1.36	167.90	10,491.61	-529.54	-41.66	14,543,696.56	2,027,638.36	40° 2' 24.781 N	109° 36' 59.633 W
10,638.00	1.40	140.29	10,586.58	-531.54	-40.68	14,543,694.58	2,027,639.37	40° 2' 24.762 N	109° 36' 59.621 W
10,687.00	1.73	146.61	10,635.57	-532.62	-39.89	14,543,693.52	2,027,640.18	40° 2' 24.751 N	109° 36' 59.611 W
Last SDI Production MWD Survey									
10,742.00	1.73	146.61	10,690.54	-534.00	-38.98	14,543,692.14	2,027,641.11	40° 2' 24.737 N	109° 36' 59.599 W
Projection To TD									

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 920-13C4BS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Site:	NBU 920-13C Pad	**MD Reference:**	GL 4710' & RKB 19' @ 4729.00ft (Pioneer 54)
Well:	NBU 920-13C4BS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM 2003.16 Multi-User Db

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 920-13C4BS PBHL	0.00	0.00	10,689.00	-515.71	-45.07	14,543,710.34	2,027,634.74	40° 2' 24.918 N	109° 36' 59.677 W
- actual wellpath misses target center by 19.23ft at 10739.90ft MD (10688.44 TVD, -533.95 N, -39.02 E)									
- Circle (radius 25.00)									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
104.00	104.00	0.12	-0.09	First SDI Surface MWD Survey
2,734.00	2,687.00	-468.18	-39.61	Last SDI Surface MWD Survey
2,770.00	2,722.37	-474.87	-40.12	First SDI Production MWD Survey
10,687.00	10,635.57	-532.62	-39.89	Last SDI Production MWD Survey
10,742.00	10,690.54	-534.00	-38.98	Projection To TD

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: PROPETRO/, PIONEER 54/54
Event: DRILLING	Start Date: 3/10/2010	End Date: 5/11/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/24/2010	7:30 - 13:30	6.00	MIRU	01	B	P		DRESS CONDUCTOR, INSTALL AIR BOWL, RIG UP RIG, BUILD DITCH, RIG UP PUMP. PRIME PUMPS, P/U MOTOR .16 RPG 1.83 DEG. SN 8065, M/U 11" Q507 SN 7019294 1ST RUN.
	13:30 - 16:00	2.50	MAINT	08	B	Z		POP OFF LEAKING. WAIT FOR POP OFF FROM TOWN AND REPLACE. PRESPUD SAFETY MEETING.
	16:00 - 17:00	1.00	DRLPRO	02	D	P		DRILL 44'-150' SPUD 3/24/2010 16:00
	17:00 - 18:30	1.50	DRLPRO	06	A	P		LD 6" DC AND P/U DIRECTIONAL TOOLS.
	18:30 - 0:00	5.50	DRLPRO	02	D	P		DRILL 150'- 706' (556', 101'/HR) WOB 5-25K, ROT 45, DH RPM 88, 550 GPM, PSI ON/ OFF 1200/900, UP/ DOWN/ ROT 58/50/55. SLIDING TO ACHIEVE LESS THEN 2 DEGREE BUILD RATE.
3/25/2010	0:00 - 8:00	8.00	DRLSUR	02	D	P		DRILL SLIDE 706'-1576' (870',109'/HR) WOB 25K, ROT 45, DH RPM 88, 550 GPM, PSI ON/ OFF 1500/1200, UP/ DOWN/ ROT 69/60/64. BUILD TO 12 DEGREE AND HOLD HEADING 184.99.
	8:00 - 8:30	0.50	DRLSUR	07	A	P		RIG SERVICE.
	8:30 - 17:00	8.50	DRLSUR	02	D	P		DRILL 1576'-2236' (660', 77'/HR) WOB 25K, ROT 45, DH RPM 88, 550 GPM, PSI ON/ OFF 1700/1400, UP/ DOWN/ ROT 78/68/72. HOLD 12 DEGREES AT HEADING 184.99.
	17:00 - 0:00	7.00	MAINT	08	A	Z		FAN BLADE ON BROKE ON PUMP AND POKED HOLE IN ENGINE COOLER. POOH 5 JTS, CIRC 3 BBLS HR. WAIT FOR NEW PUMP FROM TOWN. PUMP ARRIVED. RIGGED UP PUMP. BUT PUMP WAS STUCK IN GEAR AND WOULD NOT DISENGAGE. CIRC W/ PUMP WAIT FOR PUMP FROM TOWN.
3/26/2010	0:00 - 1:00	1.00	MAINT	08	B	Z		RIG UP PUMP.
	1:00 - 10:30	9.50	DRLSUR	02	D	P		DRILL SLIDE 2236'- 2780' (544', 57'/HR) TD 3/26/2010 10:30 WOB 25, ROT 45, DH RPM 88, 550 GPM, PSI ON/ OFF 1800/1500, UP/ DOWN/ ROT 87/68/75. START DROP. LESS THEN 2 DEGREE DROP RATE.
	10:30 - 12:00	1.50	CSG	05	F	P		CIRC AND COND. CLEAN HOLE W/ POLY SWEEPS. FULL CIRC.
	12:00 - 16:30	4.50	CSG	06	D	P		LDDS, LD DIRECTIONAL TOOLS.
	16:30 - 21:00	4.50	CSG	12	C	P		RUN 62 JTS OF 8-5/8", 28#, IJ-55 CSG W/ 8 RD LTC THREADS AND LAND FLOAT SHOE @ 2738' KB. BAFFLE PLATE RAN IN TOP OF SHOE JT LANDED @ 2699' KB. FILL CSG 600' AND 1700'. WELL KICKING THROUGH OUT CSG RUN.
	21:00 - 21:30	0.50	CSG	01	E	P		RIG DOWN RIG, RELEASE RIG 3/26/2010 21:30
	21:30 - 0:00	2.50	CSG	12	E	P		HOLD SAFETY MEETING, PRESSURE TEST LINES TO 2000 PSI. PUMP 150 BBLS H20, PUMP 20 BBLS OF GEL WATER. PUMP 210 SX (142.8 BBLS) OF 11#, 3.82 YD, 23 GAL/SK HI FILL LEAD CEMENT. PUMP 175 SX(35.8 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK 2% CALC 1/4# FLOCELE TAIL CEMENT. DROP PLUG ON FLY, DISPLACE W/ 168.1 BBLS OF H20. 540 PSI OF LIFT. BUMP PLUG W/ 900 PSI, FLOAT HELD. CIRC THROUGH OUT JOB. 20 BBLS LEAD TO SURFACE. TOP OUT THROUGH 1" W/ 125 SX (25.6 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK 4% CALC. CEMENT FELL, WILL TOP OUT ON NEXT JOB.

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: PROPETRO/, PIONEER 54/54
Event: DRILLING	Start Date: 3/10/2010	End Date: 5/11/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/30/2010	4:00 - 8:00	4.00	DRLPRO	01	E	P		R/D PREPARE FOR SKID
	8:00 - 12:00	4.00	DRLPRO	01	C	P		SKID RIG TO NBU 920-13C4BS, CENTER & LEVEL
	12:00 - 14:00	2.00	DRLPRO	01	B	P		R/U FLOOR, STAIRS & POWER CORDS
	14:00 - 16:00	2.00	DRLPRO	14	A	P		N/U BOPE, INSTALL ROT HEAD, FLOW LINE
	16:00 - 18:00	2.00	DRLPRO	15	A	P		TEST TOP DRIVE & FLOOR VALVES, 250 LOW - 5000 HIGH
	18:00 - 21:00	3.00	DRLPRO	21	D	X		WAIT ON PARTS FOR TESTER
	21:00 - 23:00	2.00	DRLPRO	15	A	P		TEST BOP, ALL VALVES & RAMS 250 LOW - 5000 HIGH
	23:00 - 0:00	1.00	DRLPRO	15	A	S		1 HR OVER ON TEST- 1 HR RIG TIME
5/1/2010	0:00 - 2:00	2.00	DRLPRO	15	A	S		TEST BLINDS & CASING, REPLACE OUTSIDE KILL LINE VALVE, INSTALL WEAR BUSHING, -2 RIG HRS FOR OVER 6 ALLOWED F/ N/U & TEST
	2:00 - 6:00	4.00	DRLPRO	06	A	P		P/U BIT, MM, TEST MM, DIR TOOLS & SCRIBE, TIH W/ BHA, INSTALL ROT RUBBER,TIH 5 STD D/P
	6:00 - 7:30	1.50	DRLPRO	09	A	P		CUT & SLIPE 110' DRLG LINE
	7:30 - 8:30	1.00	DRLPRO	06	A	P		TIH TAG CEMENT @ 2640'
	8:30 - 11:30	3.00	DRLPRO	02	F	P		DRLG CEMENT,F/E & OPEN HOLE F/ 2640 TO 2795'
	11:30 - 15:00	3.50	DRLPRO	02	D	P		SPUD WELL @ 11:30 5/1/10, DRLG F/ 2795 TO 3114', 319' @ 91.1' PH, WOB 18, RPM 45-50, MM 123, SPM 120, GPM 454, PU/SO/ROT 100-96-97, ON OFF 1100-950, DIFF 100-300, SLIDES-2830-2875, 2925-2938, 3019-3031
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG & TOP DRIVE
	15:30 - 22:30	7.00	DRLPRO	02	D	P		DRLG F/ 3114 TO 3683, 569' @ 81.3' PH, WOB 18-20, CIRC RESERVE PIT W/ GEL & POLY SWEEPS, RPM 50, MM 123, SPM 120, GPM 454, PU/SO/ROT 126-106-112, ON/OFF 1390-1220, DIFF 100-300,SLIDES 3114-3132, 3209-3231, 3304-3326, 3399-3419
	22:30 - 23:00	0.50	DRLPRO	22	M	X		CHECK SURFACE EQUIPMENT FOR 300 PSI LOSS, DETERMANED POSSIBLE UNPLUGED A JET & POLY
	23:00 - 0:00	1.00	DRLPRO	02	D	P		DRLG F/ 3683 TO 3738', 55' @ 55' PH
5/2/2010	0:00 - 14:30	14.50	DRLPRO	02	D	P		DRLG,SLIDE,SURVEY F/ 3738 TO 4821', 1083' @ 74.7' PH, WOB 18-20, CIRC RESERVE PIT W/ GEL & POLY SWEEPS, RPM 50, MM 123, SPM 120, GPM 454, PU/SO/ROT 140-130-135, ON/OFF 1500-1300, DIFF 150-350, TOR OFF/ON 3000-5000, SLIDES 4536-4556, 4602-4617, 4631-4651, 4694-4704
	14:30 - 15:00	0.50	DRLPRO	07	A	P		SERVICE RIG & TOP DRIVE
	15:00 - 0:00	9.00	DRLPRO	02	D	P		DRLG,SLIDE, SURVEY F/ 4821 TO 5549',728' @ 80.8' PH ,WOB 18-20, CIRC RESERVE PIT W/ GEL & POLY SWEEPS,RPM 50, MM 123, SPM 120, GPM 454, PU/SO/ROT 150-130-140, ON/OFF 1700-1350, DIFF 200-400, TOR ON/OFF 5100-4100, NO SLIDES
5/3/2010	0:00 - 15:00	15.00	DRLPRO	02	D	P		DRLG,SLIDE,SURVEY F/ 5549 TO 6812',1263' @ 84.2' PH, WOB 20, MW 8.6, VIS 32 START LIGHT MUD UP @ 6812', RPM 45-50, MM 123, SPM 120, GPM 454, PU/SO/ROT 190-150-164, ON/OFF 1800-1600, TOR ON/OFF 5400-4400, NO SLIDES
	15:00 - 15:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRLG,SLIDE, SURVEY F/ 6812 TO 7285', 473' @ 55.6' PH, WOB 20M MW 8.8, VIS 36, RPM 50, MM 123, PU/SO/ROT 205-145-170, ON/OFF 1850-1600, TOR ON/OFF, 5400-4400, SLIDE 6927-6942

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010	
Project: UTAH-UINTAH	Site: NBU 920-13C PAD		Rig Name No: PROPETRO/, PIONEER 54/54
Event: DRILLING	Start Date: 3/10/2010		End Date: 5/11/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/4/2010	0:00 - 16:00	16.00	DRLPRO	02	D	P		DRLG,SLIDE SURVEY F/ 7285 TO 7761', 476' @ 29.7' PH, MW 10, VIS 37, WOB 20, RPM 50, MM 123, SPM 120, GPM 454, PU/SO/ROT 200-145-172, ON/OFF PSI 2100-1900, DIFF 150-300, TOR ON/OFF 9000-7500, 1 SLIDE 7476-7491
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DRLG F/ 7761 TO 7990', 229' @ 30.5' PH, MW 10.1, VIS 39, WOB 20, RPM 50, MM 123, SPM 120, GPM 454, PU/SO/ROT 217-145-171, ON/OFF PSI 2400-2100, DIFF 150-300, TOR ON/OFF 9000-7500
5/5/2010	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRLG F/ 7900 TO 8422'.432' @ 30.85' PH, MW 10.5, VIS 39, WOB 20, RPM 50, MM 120, SPM 117, GPM 443, PU/SO/ROT 210-150-175, ON/OFF PSI 2500-2250, DIFF 150-300, ON/OFF TOR 9000-7500, SLIDES 8327-8335
	14:00 - 14:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRLG F/ 8422 TO 8735', 313' @ 32.9' PH, MW 10.8, VIS 41, WOB 20-22, RPM 50, MM 120, SPM 117, GPM 443, PU/SO/ROT 225-150-180, ON/OFF PSI 2700-2500, DIFF 150-300, ON/OFF TOR 1200-9000, SLIDES 8707-8722
5/6/2010	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRLG F/ 8735 TO 9182', 447' @ 33.1' PH, MW 11.4, GAS CUT TO 11.1, VIS 42, WOB 20-22, RPM 45-50, MM 120, SPM 117, GPM 443, PU/SO/ROT 230-150-170, ON/OFF PSI 2800-2500, DIFF 150-350, TOR ON/ONN 10,500-9000, SLIDES 8802-8827, 9087-9102
	13:30 - 14:00	0.50	DRLPRO	07	A	P		SERVICE RIG
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRLG F/ 9182 TO 9515', 333' @ 33.3' PH, MW 12, VIS 42, NO GAS CUT, WOB 22, RPM 50, SPM 110, GPM 416, PU/SO/ROT 245-160-190.-, ON/OFF PSI 2800-2600, DIFF 150-300, TOR ON/OFF 8500-6500, SLIDE 9287-9299
5/7/2010	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRLG F/ 9515 TO 9920', 405' @ 28.9' PH
	14:00 - 19:30	5.50	DRLPRO	06	A	P		TRNB/ L/D BIT,MM,IBS
	19:30 - 21:30	2.00	DRLPRO	21	D	Z		RECALABRATE MWD TOOL
	21:30 - 0:00	2.50	DRLPRO	06	A	P		P/U BIT #2,MM, TIH FILL @ 3000,6000
5/8/2010	0:00 - 4:30	4.50	DRLPRO	06	A	P		FINISH TIH FILL 8000', TIGHT @ 4400 OUT, CLEAN IN
	4:30 - 5:30	1.00	DRLPRO	03	D	P		WASH & REAM 60' TO BOTTOM 5' FILL BREAK IN BIT #2
	5:30 - 16:00	10.50	DRLPRO	02	D	P		DRLG F/ 9920 TO 10219',MW 12, VIS 44, LCM 5%, WOB 20, RPM 50, MM 92, SPM 110, GPM 416, PU/SO/ROT 220-165-197, ON/OFF PSI 2800-2600, DIFF 150-300, TOR ON/OFF 9500-7500
	16:00 - 16:30	0.50	DRLPRO	07	A	P		SERVICE RIG
	16:30 - 0:00	7.50	DRLPRO	02	D	P		DRLG F/ 10219 TO 10415', MW 12.4, VIS 42, LCM 5%, WOB 23, RPM 50, MM 92, SPM 110, GPM 416, PU/SO/ROT 225-170-202, ON/OFF PSI 3000-2750, DIFF 150-350, TOR ON/OFF 9500-7500
5/9/2010	0:00 - 10:00	10.00	DRLPRO	02	D	P		DRLG F/ 10,415 TO 10,742 TD @ 10:00 AM 5/9/10, MW 12.5, VIS 45,
	10:00 - 11:00	1.00	DRLPRO	05	C	P		CIR & COND HOLE F/ SHORT TRIP
	11:00 - 12:30	1.50	DRLPRO	06	E	P		SHORT TRIP 20 STDS, 1742' 1000' ABOVE LAST TRIP, NO PROBLEMS
	12:30 - 14:00	1.50	DRLPRO	05	C	P		CIRC & COND HOLE TO POOH
	14:00 - 19:30	5.50	DRLPRO	06	B	P		POOH F/ OPEN HOLE LOGS
	19:30 - 23:30	4.00	DRLPRO	11	C	P		HPJSM W/ RIG & LOGGING CREWS, R/U & RUN LOGS TO 7204 HIT BRIDGE, WORKED ON BRIDGE COULD NOT GET THROUGH, POOH & R/D

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: PROPETRO/, PIONEER 54/54
Event: DRILLING	Start Date: 3/10/2010	End Date: 5/11/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	23:30 - 0:00	0.50	DRLPRO	06	E	X		TIH F/ WIPER TRIP
5/10/2010	0:00 - 4:30	4.50	DRLPRO	06	E	X		TIH, WASH BRIDGE @ 7300', TIH
	4:30 - 6:00	1.50	DRLPRO	05	C	X		CIRC & COND HOLE F/ LOGS
	6:00 - 10:30	4.50	DRLPRO	06	E	X		POOH F/ LOGS
	10:30 - 16:00	5.50	DRLPRO	11	C	P		RUN TRIPLE COMBO LOGS F/ 10744' LOGGER'S DEPTH, R/D, PULL WEAR BUSHING
	16:00 - 0:00	8.00	DRLPRO	12	C	P		RUN CASING, 26 JT P-110 LTC, XO,227 JTS I-80 BTC
5/11/2010	0:00 - 1:30	1.50	DRLPRO	12	C	P		FINISH RUNNING CASING TO 10,737' R/D
	1:30 - 3:00	1.50	DRLPRO	05	A	P		CIRC OUT GAS
	3:00 - 8:00	5.00	DRLPRO	12	E	P		HPJSM W/ RIG & CEMENTING CREWS, PSI TEST LINES TO 5000, PUMP 40 BBLS WATER SPACER, LEAD 264 BBLS 750 SKS 12.5 PPG 1.98YLD, TAIL 345 BBLS 1550 SKS 14.3 PPG 1.25 YLD, WASH UP & DROP PLUG & DISPLACE W/ 166 BBLS CLAYFIX WATER, BUMP PLUG @ 4015 PSI FINAL LIFT PSI OF 3225 EST TOP OF TAIL 3930, FULL RETURNS THOUGH OUT JOB W/ 40 BBLS SPACER & 65 BBLS CEMENT TO PIT, 2 BBLS BACK TO TRUCK, FLUSH STACK, SET PACK OFF
	8:00 - 11:00	3.00	DRLPRO	14	A	P		N/D & CLEAN PITS, RELEASE RIG TO NBU 920-13D2DS @ 11:00 5/11/10

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 8/27/2010	End Date: 9/8/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/27/2010	7:00 - 13:00	6.00	COMP	37	B	P		MIRU B & C QUICKTEST, PRESSURE TEST CSG AND FRAC VALVE TO 7000#, OK, (PERF STG #1) R/U CASEDHOLE WIRELINE RIH, W/ PERF GUNS, PERF THE MESAVERDE @ 10628' - 10632' 3-SPF, 10565' - 10568', 4-SPF, 10528' - 10530', 4-SPF, 10504' - 10506', 3-SPF, USING 3 3/8" SCALLOP GUNS, 23 gm, 0.36" HOLE, 90* PHS, 38 HOLES, SWI

8/30/2010	7:00 - 8:00	1.00	COMP	36	E	P		(FRAC STG #1) WHP = 1694#, BRK DN PERF 4218 # @ 4.8 B/M, INJ-RT = 48.2 B/M, INJ-P = 5512 #, ISIP = 2993 #, F.G.= .72 , PUMP 3 BBLS 15% HCL AHEAD OF INJ, CALC 38/38 PERF OPEN, PUMP 1075 BBLS SLK WTR & 31,048 # OTTAWA SAND,
								ISIP = 3044#, F.G. = .72 , NPI = 51#, MP = 6447 #, MR = 53.5 B/M, AP = 5200 #, AR = 52 B/M, 31,048 # TLC SAND,
								COMMENTS =

	8:00 - 9:00	1.00	COMP	36	E	P		(PERF STG #2) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 10400 ', PERF THE MESAVERDE F/ 10,248'-52', 4 SPF, 16 HOLES. 10,206'-08', 3 SPF, 6 HOLES. 10,164'-66', 3 SPF, 6 HOLES. 10,106'-08', 3 SPF, 6 HOLES. 10,078'-80', 3 SPF, 6 HOLES. 40 HOLES. POOH, X-OVER FOR FRAC CREW.
8/31/2010	7:00 - 8:00	1.00	COMP	36	E	P		(FRAC STG #2) WHP 1880 PSI, BRK 4582 PSI @ 7.4 BPM. ISIP 2822 PSI, FG .73. PUMP 100 BBLS @ 49 BPM @ 5300 PSI = 100% HOLES OPEN. ISIP 3505 PSI, FG .78, NPI 683 PSI. MP 7288 PSI, MR 51 BPM, AP 5100 PSI, AR 50 BPM, PMP 2042 BBLS SW & 68,944 LBS OF 30/50 SND & 5,000 LBS OF 20/40 SLC SND. TOTAL PROP 73,944 LBS, COMMENTS = SCREENED OFF / FLOWED BACK AND REFLUSHED
	8:00 - 9:00	1.00	COMP					(PERF STG #3) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 10058 ', PERF THE MESAVERDE @ 10024' - 10028', 4-SPF, 9968' -9970', 3-SPF, 9922' - 9926', 3-SPF, 9764' - 9766', 3-SPF, USING 3 3/8" SCALLOP GUNS, 23gm, 0.36" HOLE 90* PHS, 40 HOLES,
	9:00 - 10:00	1.00	COMP					(FRAC STG #3) WHP = 1806 #, BRK DN PERF 5012 # @ 10.1 B/M, INJ-RT =30 B/M, INJ-P = 6035 #, ISIP = 2953 #, F.G.73 CALC 15/40 PERF OPEN, PUMP 1093 BBLS SLK WTR & 40449 # OTTAWA SAND, ISIP = 3107 #, F.G. =.75 , NPI = 154 #, MP = 6459 #, MR = 53 B/M, AP = 5400#, AR = 52 B/M, # SAND, 5000# TLC SAND, COMMENTS =
	10:00 - 11:00	1.00	COMP	37	B	P		(PERF STG #4) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 9710', PERF THE MESAVERDE @ 9638'-9642' 4 SPF, 9594'-9596' 3 SPF, 9514'-9516' 3 SPF, 9453'-9456' 3 SPF ', USING 3 3/8" SCALLOP GUNS, 23gm, 0.36" HOLE 90* PHS, 37 HOLES,

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 8/27/2010	End Date: 9/8/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:00 - 12:00	1.00	COMP	36	E	P		(FRAC STG #4) WHP = 1571 #, BRK DN PERF 3888 # @ 8.6 B/M, INJ-RT = 50 B/M, INJ-P = 5400 #, ISIP = 2709 #, F.G.72 CALC 37/37 PERF OPEN, PUMP 1173 BBLS SLK WTR & 44962 # OTTAWA SAND, ISIP = 2914 #, F.G. =.74 , NPI = 205 #, MP = 5800 #, MR = 51.2 B/M, AP = 4500 #, AR = 50.5 B/M, # SAND, 5000 # TLC SAND, COMMENTS =
	12:00 - 18:00	6.00	COMP					(PERF STG #5) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 9400', PERF THE MESAVERDE @ 9344'-9350' 4 SPF, 9130'-9134' 3 SPF ', USING 3 3/8" SCALLOP GUNS, 23gm, 0.36" HOLE 90* PHS, 36 HOLES, SWIFN.
9/1/2010	6:30 - 6:45	0.25	COMP	48		P		HSM, REVIEW OERF & FRAC
	6:45 - 8:00	1.25	COMP					(FRAC STG #5) WHP = 1525 #, BRK DN PERF 2908 # @ 8.7 B/M, INJ-RT =51.7 B/M, INJ-P = 4325 #, ISIP = 2105 #, F.G.66 CALC 36/36 PERF OPEN, PUMP 1379 BBLS SLK WTR & 55069 # OTTAWA SAND, ISIP = 2862 #, F.G. =.74 , NPI = 757 #, MP = 5184 #, MR = 52.2 B/M, AP = 4300 #, AR = 51 B/M, # SAND, 5000 # TLC SAND, COMMENTS =
	8:00 - 9:00	1.00	COMP					(PERF STG #6) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 9070', PERF THE MESAVERDE @ 8924'-8928' 3 SPF, 8824'-8826' 3 SPF, 8790'-8794' 3 SPF, 8746'-8749' 3 SPF ', USING 3 3/8" SCALLOP GUNS, 23gm, 0.36" HOLE 90* PHS, 27/39 HOLES,
	9:00 - 10:00	1.00	COMP					(FRAC STG #6) WHP = 1246 #, BRK DN PERF 5486 # @ 8.7 B/M, INJ-RT = 49.6 B/M, INJ-P = 5571 #, ISIP = 2487 #, F.G.74 CALC 27/39 PERF OPEN, PUMP 1210 BBLS SLK WTR & 47399 # OTTAWA SAND, ISIP = 2936 #, F.G. =.74 , NPI = 445 #, MP = 6157 #, MR = 52.5 B/M, AP = 4800 #, AR = 50.7 B/M, # SAND, 5000# TLC SAND, COMMENTS =
	10:00 - 11:00	1.00	COMP					(PERF STG #7) RIH W/ HALLIURTON 8K CBP AND PERF GUNS, SET CBP @ 8680 ', PERF THE MESAVERDE @ 8558'-8562' 3 SPF, 8468'-8472' 3 SPF, 8440'-8442' 3 SPF ', USING 3 3/8" SCALLOP GUNS, 23gm, 0.36" HOLE 90* PHS, 30 HOLES,
	11:00 - 12:00	1.00	COMP					(FRAC STG #7) WHP = 189 #, BRK DN PERF 4689 # @ 10.7 B/M, INJ-RT =51.6 B/M, INJ-P = 4740 #, ISIP = 2561 #, F.G.73 CALC 30/30 PERF OPEN, PUMP 992 BBLS SLK WTR & 37024 # OTTAWA SAND, ISIP = 2540 #, F.G. =.73 , NPI = #, MP = #, MR = B/M, AP = #, AR = B/M, # SAND, 5000# TLC SAND, COMMENTS = SET TOP KILL @ 8390' TOTAL SAND=329895# TOTAL WTR=8964 BBLS
9/7/2010	7:00 - 7:30	0.50	COMP	48		P		HSM, NU BOPS, WATCHING MAN W/ HAMMER.
	7:30 - 16:00	8.50	COMP	31	I	P		ND FRAC VALVES, NU BOPS, RU FLOOR & TBG EQUIP. TALLY & PU 37/8 BIT, POBS, 1.875 X/N & 264 JTS 23/8 L-80 OFF FLOAT. TAG UP @ 8346 '.L/D 2 JTS EOT @ 8309' RU DRLG EQUIP PREP TO D/O IN AM.
9/8/2010	7:00 - 7:30	0.50	COMP	48		P		HSM, DRILLING PLUGS W/ POWER SWIVEL.

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 8/27/2010	End Date: 9/8/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 16:00	8.50	COMP	44	C	P		BROKE CIRC CONVENTIONAL. TEST BOPS TO 3,000# PSI, RIH. C/O 44' SAND TAG 1ST PLUG @ 8390' DRL PLG IN 6 MIN 700# PSI INCREASE RIH. C/O 40' SAND TAG 2ND PLUG @ 8680' DRL PLG IN 4 MIN 500# PSI INCREASE RIH. C/O 75' SAND TAG 3RD PLUG @ 9070' DRL PLG IN 4 MIN 1000# PSI INCREASE RIH. C/O 50' SAND TAG 4TH PLUG @ 9400' DRL PLG IN 5 MIN 800# PSI INCREASE RIH. C/O 68' SAND TAG 5TH PLUG @ 9710' DRL PLG IN 5 MIN 300# PSI INCREASE RIH. C/O 30' SAND TAG 6TH PLUG @ 10,058' DRL PLG IN 6 MIN 600# PSI INCREASE RIH. C/O 105' SAND TAG 7TH PLUG @ 10,400' DRL PLG IN 4 MIN 600# PSI INCREASE RIH. C/O TO PBTD @ 10,692' CIRC CLEAN, RD SWIVEL. L/D 21 JTS TBG, LAND TBG ON 316 JTS. ND BOPS NU WH, PMP OFF BIT LET WELL SET FOR 30 MIN FOR BIT TO FALL, TURN OVER TO FB CREW. RD MOVE OVER & RU ON NBU 920- 13D2DS ND FRAC VALVES NU BOPS RU FLOOR & EQUIP. SDFN KB = 19' 71/16 HANGER .83' 316 JTS 23/8 L-80 = 10,005.77' POBS & 1.875 X/N = 2.20' EOT @ 10,027.809' 353 JTS HAULED OUT 316 LANDED 37 TO RETURN TWTR = 9184 BBLS TWR = 2500 BBLS TWLTR = 6684 BBLS
9/9/2010	7:00 -		PROD	33	A			7 AM FLBK REPORT: CP 3300#, TP 2425#, 20/64" CK, 60 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 3757 BBLS LEFT TO RECOVER: 5427
	8:30 -		PROD	50				WELL TURNED TO SALES @ 0830 HR ON 9/9/10 - 1600 MCFD, 1320 BWPD, CP 3550#, FTP 2500#, CK 18/64"
9/10/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 3475#, TP 2350#, 18/64" CK, 38 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 4782 BBLS LEFT TO RECOVER: 4402
9/11/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 3100#, TP 2150#, 18/64" CK, 28 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 5531 BBLS LEFT TO RECOVER: 3653
9/12/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2900#, TP 2000#, 18/64" CK, 25 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 6131 BBLS LEFT TO RECOVER: 3053

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010	
Project: UTAH-UINTAH	Site: NBU 920-13C PAD		Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 8/27/2010		End Date: 9/8/2010
Active Datum: RKB @4,729.01ft (above Mean Sea Level)	UWI: NE/NW/0/405/N/2146/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/29/2010	7:00 -			50				WELL IP'D ON 9/29/10 - 2644 MCFD, 0 BOPD, 99 BWPD, CP 2699#, FTP 1895#, CK 20/64", LP 128#, 24 HRS

API Well No: 43047505240000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0579

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tr

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 920-13C4BS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047505240000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/24/2010	☐ ACIDIZE	☐ ALTER CASING	✓ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests approval to conduct wellhead/casing repair operations on the subject well location. Please find the attached procedure for the proposed repair work on the subject well location.

Accepted by the Utah Division of Oil, Gas and Mining

Date: 11/24/2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE		**DATE**
N/A		11/24/2010

RECEIVED November 24, 2010

WORKORDER #: 88104325

Name: NBU 920-13C4BS 11/23/10
Location: NENW Sec. 13 T9S R20E
Uintah County, UT

ELEVATIONS: 4710' GL 4729' KB

TOTAL DEPTH: 10742' PBTD: 10692'

SURFACE CASING: 8 5/8", 28# J-55 ST&C @ 2753'

PRODUCTION CASING: 4 1/2", 11.6#, I-80 LT&C @ 10737'
Marker Joint 5122'-5138'
T.O.C.@ ~800

PERFORATIONS: Mesaverde 8468' – 10632'
Wasatch 8440' – 8442'

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES	
				(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55 tbg	7,700	8,100	1.901"	0.00387	0.1624
4 ½" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
2 3/8" by 4 ½" Annulus				0.0101	0.4227

GEOLOGICAL TOPS:

1736' Green River
1878' Bird's Nest
2541' Mahogany
5210' Wasatch
8466' Mesaverde
10742' Botom of MV

Completion Information:

- 9/6/10 - Perf and frac gross MV interval f/ 8440' – 10632' in 7 stages using 329,895# sand & 8964 bbls slickwater
- Well IP'd on 9/29/10 - 2644 MCFD, 0 BOPD, 99 BWPD, CP 2699#, FTP 1895#, CK 20/64", LP 128#, 24 HRS

RECEIVED November 24, 2010

NBU 920-13C4BS – WELLHEAD REPLACEMENT PROCEDURE

PREP-WORK PRIOR TO MIRU:

1. Dig out down to the 2" surface casing valve or to the valve on the riser off the surface casing.

2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.

3. Open casing valve and record pressures.

4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100' from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.

5. Open the relief valve and blow well down to the atmosphere.

6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.

7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

WORKOVER PROCEDURE:

1. MIRU workover rig.

2. Kill well with 10# brine / KCL (dictated by well pressure).

3. Remove tree, install double BOP with blind and 2 3/8" pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.

4. Pooh w/ tubing.

5. Rig up wireline service. RIH and set CBP @ ~8390'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service.

6. Remove BOP and ND WH.

7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

RECEIVED November 24, 2010

CUT/PATCH PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
2. Pooh, LD cutters and casing.
3. PU & RIH w/ 4 ½" 10k external casing patch on 4 ½" I-80 or P-110 casing.
4. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
5. Install C-22 slips. Land casing w/ 80,000# tension.
6. Cut-off and dress 4 ½" casing stub.
7. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~8390'. Clean out to PBTD (10692').
8. POOH, land tbg and pump off POBS.
9. NUWH, RDMO. Turn well over to production ops.

BACK-OFF PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 ½" overshot. RIH, latch fish. Pick string weight to neutral.
4. MIRU wireline services. RIH and shoot string shot at casing collar @ 46'.
5. MIRU casing crew.
6. Back-off casing, Pooh.
7. PU new casing joint w/ entry guide and RIH. Tag casing top. Thread into casing and torque up to +/- 6000#.
8. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
9. Install C-22 slips. Land casing w/ 80,000# tension.
10. Cut-off and dress 4 ½" casing stub.
11. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~8390'. Clean out to PBTD (10692').
12. POOH, land tbg and pump off POBS.
13. NUWH, RDMO. Turn well over to production ops.

RECEIVED November 24, 2010

Logan High Pressure Casing Patches
Assembly Procedure

All parts should be thoroughly greased before being assembled.

1. Install all four Logan Type “L” Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.

2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type “L” Packers.

3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.

4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.

5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.

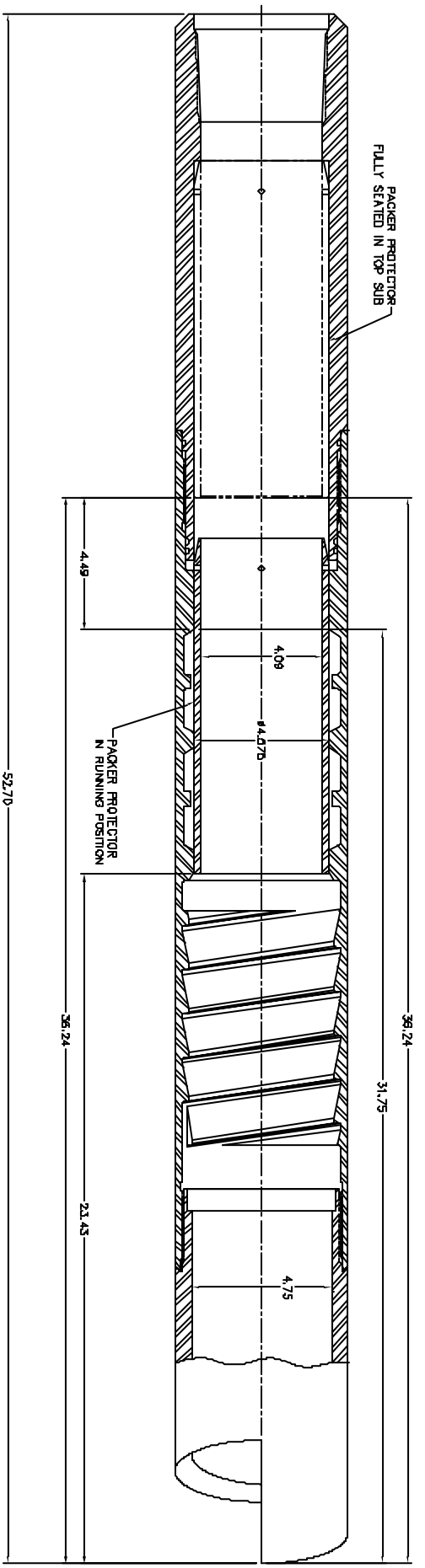
6. Install the Cutlipped Guide into the lower end of the Bowl.

7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.

8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

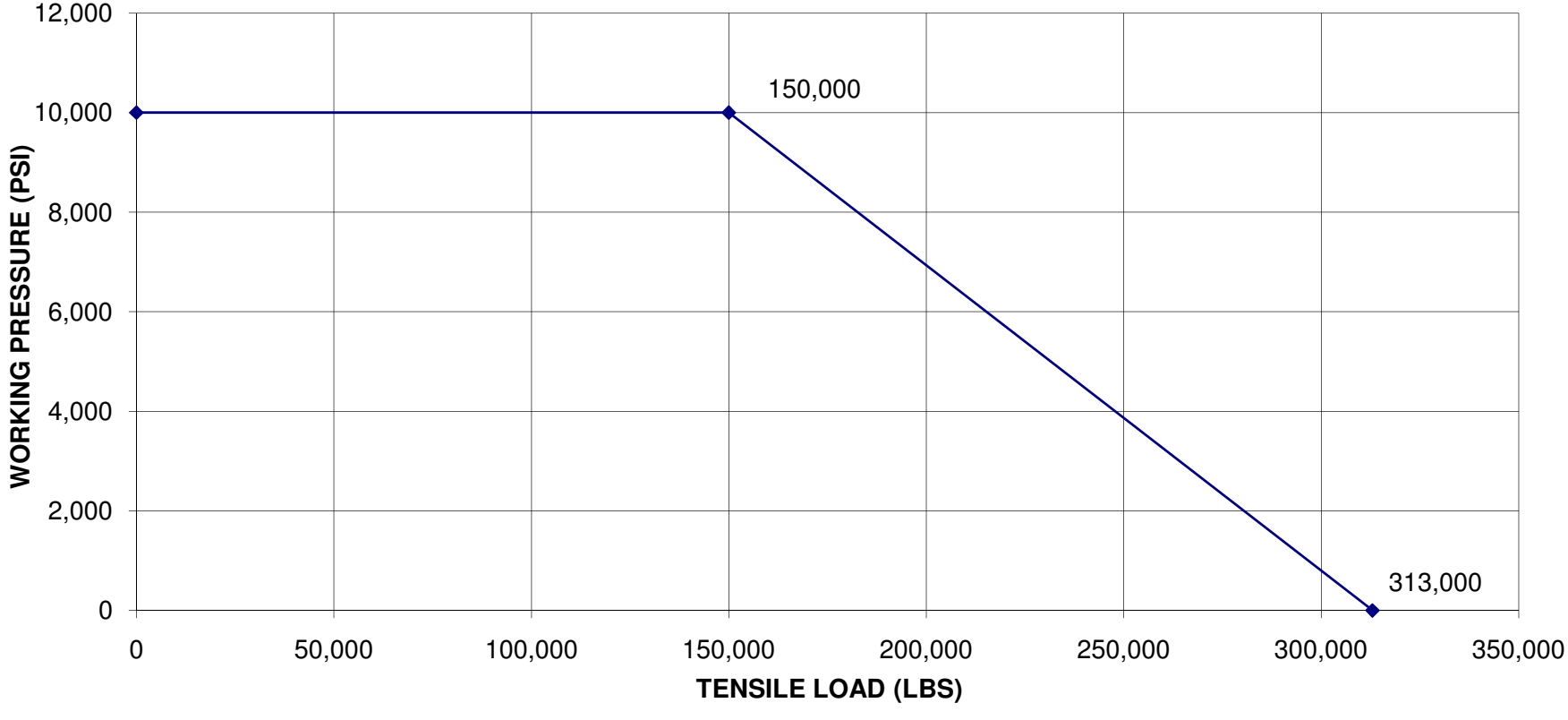
Follow recommended Make-Up Torque as provided in chart.

RECEIVED November 24, 2010



510L-005-001 4-1/2" LOGAN HP CASING PATCH

STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L
LOGAN ASSEMBLY NO. 510L-005 -000



COLLAPSE PRESSURE:
11,222 PSI @ 0 TENSILE
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:
Tensile Strength w/ 0 Int. Press.= 472,791lbs.
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU 0579

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Ute Tr

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 920-13C4BS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047505240000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6515 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0405 FNL 2146 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NENW Section: 13 Township: 09.0S Range: 20.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	✓ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 6/7/2011	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Wellhead Repair

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE OPERATOR HAS CONCLUDED WELLHEAD/CASING REPAIRS ON THE SUBJECT WELL LOCATION. PLEASE SEE THE ATTACHED CHRONOLOGICAL HISTORY FOR DETAILS OF THE OPERATIONS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE		**DATE**
N/A		6/7/2011

RECEIVED Jun. 07, 2011

US ROCKIES REGION

Operation Summary Report

Well: NBU 920-13C4BS BLUE	Spud Conductor: 3/10/2010	Spud Date: 3/24/2010
Project: UTAH-UINTAH	Site: NBU 920-13C PAD	Rig Name No: MILES-GRAY 1/1
Event: WELL WORK EXPENSE	Start Date: 2/3/2011	End Date: 3/4/2011
Active Datum: RKB @4,729.00ft (above Mean Sea Leve	UWI: NE/NW/0/9/S/20/W/13/0/0/6/PM/N/920.00/W/0/2,100.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/7/2011	7:00 - 13:00	6.00	WO/REP	30	A	P		JSA-SAFETY MEETING, ROAD RIG FROM NBU 1021-13H4CS, SPOT RIG AND EQUIPT ON LOC, FOUND ANCHORS. R/U SERVICE UNIT,
	13:00 - 15:00	2.00	WO/REP	30	F	P		PUMP 40 BBLS WTR DN TBG, N/D WH, N/U BOPS, R/U TBG EQUIPT,
	15:00 - 17:30	2.50	WO/REP	31	I	P		TOOH W/ 2 3/8" TBG, 96 STANDS @ 6000', DRAIN UP PUMP AND LINES, SDFN
2/8/2011	7:00 - 9:00	2.00	WO/REP	48		P		JSA-SAFETY MEETING ON TRIP TBG IN HIGH WIND, WAIT FOR HIGH WIND TO DIE DOWN.
	9:00 - 10:30	1.50	WO/REP	31	I	P		TOOH W/ 2 3/8" TBG,TOTAL TBG OF 126 STANDS IN DERRICK AND LAY DN 64 JTS, ALL GOOD TBG,
	10:30 - 14:15	3.75	WO/REP	34	I	P		R/U CASED HOLE WIRELINE, RIH W/ 4 1/2" GAUGE RING TO @ 8400', RIH W/ BAKER 10K CBP, SET CBP @ 8330', DUMP 4 SACKS CEMENT ON TOP OF CBP, R/D WIRELINE,
	14:15 - 16:15	2.00	WO/REP	31	I	P		P/U NOTCH COLLAR XN-NIPPLE, TIH W/ 2 3/8" TBG 256 JTS N-8O, LANDED TBG W/ HANGER, EOT @ 8000',
	16:15 - 17:30	1.25	WO/REP	30		P		N/D BOPS, N/U WH, HOOK FLOW LINES AND MONITORING GAUGES, R/D RIG,.
3/2/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= PWR SWIVEL SAFETY
	7:15 - 19:00	11.75	WO/REP	30		P		MIRU ND WELLHEAD NU BOPS POOH W/ TUBING 128 STANDS RD FLOOR & TUBING EQUIP ND BOPS ND WELLHEAD, RUN PLUM BOB ON TAPE MEASURE DWN ANN OF CASING 100' NO CEMENT PLAN BACKOFF FILL HOLE W/ TMAC RU PWR SWVL PU INT CASING CUTTER CUT 4-1/2" CASING @ 9' FROM SURFACE, RD PWR SWVL RU OVERSHOT, W/L, CASING CREW BACK OFF 4-1/2 AT FIRST COLLAR LD JNT OF CASING, PU SKIRTED JNT RIH PU PUPJNT MAKE UP TO 4200# TORQUE UP TO BENCH MARK @ 2200# CONTINUE TO TORQUE BURY DIAMOND @ 4500# RIH MAKE UP SKIRTED JNT ON TO STRING TO 5000# TORQUE 12-1/4 ROUNDS PULL 100K ON STRING RD CASING CREW SDFN
3/3/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= TESTING SAFETY
	7:15 - 17:00	9.75	WO/REP	30		P		NU TESTERS TEST CASING AS PER PROG TO 7000# GOOD TEST SET C-21 SLIPS W/ 90000# TENSION NU SURFACE TEST LEAK OFF BOTH TEST RD TESTERS NU WELLHEAD NU BOPS RU FLOOR & TUBING EQUIP PU POBS PKG RIH TAG CEM @ 8266' RU PWR SWVL & DRILL HEAD DRILL THRU 30' CEM TO CBP 4 MIN THRU CBP WELL WENT ON VAC LOST CIRC TRIED TO REGAIN CIRC F/ 30 MIN NO SUCESS POOH 2 JNTS WELL STILL ON VAC SDFN
3/4/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= CIRC W/ FOAMER
	7:15 - 17:00	9.75	WO/REP	30		P		SIWP= 850 PSI OPEN WELL TO FBT MIRU FOAMER CBP MOVED UP HOLE TO END OF TUBING @ 8213' EST CIRC W/ FOAMER DRILL & C/O FILL & CBP RIH TAG @ 10606' C/O & DRILL TO 10669' TAG SOLID CIRC CLEAN PUH LAND TUBING @ 10026.76 W/ 316 JNTS RD SWVL RD FLOOR & TUB EQUIP ND BOPS NU WELLHEAD DROP BALL PUMP OFF BIT @ 0 PSI PUMP 50 BBLS SUSPECT HYDROSTATIC PUSHED BIT OFF RDRIG MOVE TO 13C1AS

RECEIVED Jun. 07, 2011

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **KERR-McGEE OIL & GAS COMPANY, L.P.**

Well Name: **NBU 920-13C4BS**

Api No: **43-047-50524** Lease Type: **FEDERAL**

Section **13** Township **09S** Range **20E** County **UINTAH**

Drilling Contractor **PETE MARTIN DRLG** RIG # **BUCKET**

SPUDDED:

Date **03/10/2010**

Time **12:00 NOON**

How **DRY**

Drilling will Commence:

Reported by **JAMES GOBER**

Telephone # **(435) 828-7024**

Date **03/112010** **Signed** **CHD**

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: P.O. Box 173779
city DENVER
state CO zip 80217
Phone Number: (720) 929-6100

Well 1 NENW

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304750523	NBU 920-13C1AS	~~NENN~~	13	9S	20E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	3/10/2010	3/22/10

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 3/10/2010 AT 9:00 HRS. BHL = NENW

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304750524	NBU 920-13C4BS	NENW	13	9S	20E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	3/10/2010	3/22/10

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 3/10/2010 AT 12:00 HRS. BHL = NENW

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304750522	NBU 920-13D2DS	NENW	13	9S	20E	UINTAH

Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date
B	99999	2900	3/10/2010	3/22/10

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 3/10/2010 AT 15:00 HRS. BHL = Sec 12 SWSW

ACTION CODES:
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

ANDY LYTLE
Name (Please Print)
Signature
REGULATORY ANALYST
Title
3/11/2010
Date

RECEIVED
MAR 1 1 2010
DIV. OF OIL, GAS & MINING

(5/2000)